Appendix I: HCDFRS General Orders

General Order 100.04: Position Requirements

DEPARTMENT OF FIRE AND RESCUE SERVICES

GENERAL ORDER

100.04

Originating From	Issue Date	Revision Date	Attachments
Bureau of Administrative Services	**06/14/1984**	**04/20/2012**	**A**

SUBJECT: **Position Requirements – Licenses, Certifications, Experience and Education Prerequisites**

APPLICABILITY: **Career, Uniformed Personnel**

POLICY

Most uniformed positions within Howard County Department of Fire and Rescue Services (DFRS) may require the incumbent to maintain specific licenses and certifications in accordance with employee classification, employee position description, and/or operational standards. These positions also include minimum experience and education requirements. This order outlines the revised minimum requirements and serves as notification to uniformed employees who are preparing for promotion on/after November 1, 2016. Updates to the Howard County Classification Plan will be legislated prior to 2016 to reflect these new minimum standards for experience and education requirements.

This order summarizes minimum requirements and preferred elements for promotable ranks of the uniformed career staff, as well as includes general guidelines and responsibilities regarding license/certification maintenance.

1. GUIDELINES FOR REVISED POSITION EXPERIENCE AND EDUCATION PREREQUISITES
   1.1. Implementation of the Leadership Education and Development (LEAD) program's *Officer Certifications & Development Objectives* (Attachment A) will increase the effectiveness of leadership within DFRS by defining specific and available objectives for officer development. These pathways include a broad set of both required and preferred prerequisites that are important to becoming a good leader.

   1.2. DFRS will incorporate the *Officer Certifications & Development Objectives* of the LEAD program into the promotion requirements for officer positions among the uniformed career staff. The implementation timeline for these objectives to become required promotional elements are as follows:
      1.2.1. Candidates for Lieutenant and Captain: Eligibility lists effective November 1, 2016 and afterward.
      1.2.2. Candidates for Battalion Chief and Assistant Chief: Eligibility lists created in 2017 and afterward.

2. INDIVIDUAL RESPONSIBILITY FOR LICENSE/CERTIFICATION MAINTENANCE
   2.1. Uniformed career personnel must possess specific, valid licenses and certification as denoted in the appropriate position description. Some personnel may be required to maintain advanced certifications associated with their current job assignment. These advanced certifications could include, but are not limited to: ALS-Intermediate, ALS-Paramedic, hazmat technician, etc. It is the individual's responsibility to obtain and maintain current and valid licenses, certifications, and/or registrations.

2.2. Personnel must make notification to their immediate supervisor when the status of any required license or certification has changed. Written notification must be completed no later than the start of the next regularly scheduled work period, if not earlier. A non-exhaustive list of events requiring notification contains:

2.2.1. Changes to driver's licenses status, to include but not limited to:

2.2.1.1. Driver's license is expired, revoked or suspended;

2.2.1.2. DOT/CDL card is expired, revoked or suspended;

2.2.1.3. Individual has received a citation or is charged with driving under the influence, and/or driving while impaired;

2.2.1.4. Individual's physician has ordered the individual not to drive while under treatment. Doctor's certificate shall be attached to the written report;

2.2.1.5. Individual is in a probationary driving status as determined by a court of law or the motor vehicle administration; or,

2.2.1.6. Any other reportable occurrence as listed in the Howard County Employee Manual.

2.2.2 Loss, suspension, or revocation of any required licenses, certifications, and/or registrations.

2.2.3 Filing of charges against an individual by any enforcement/compliance organization and/or certification agency,

2.2.4 Any other status change regarding licenses or certifications.

3. SUPERVISORY RESPONSIBILITY REGARDING LICENSE/CERTIFICATION MAINTENANCE

3.1. For uniformed career personnel, the immediate supervisor shall sign the individual's written report (to indicate that the supervisor has read the document) and forward it through the chain of command to Assistant Chief, Bureau of Administrative Services. Same day notification by the supervisor to the field battalion chief is mandatory when the individual is operational in the field.

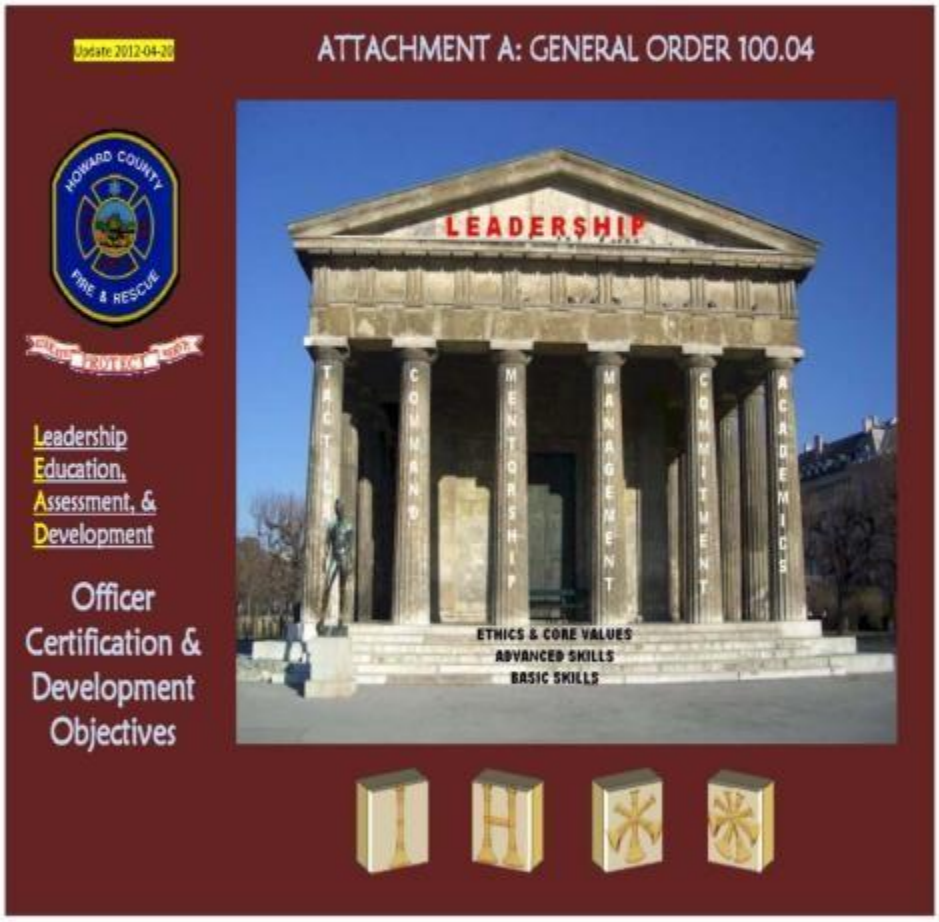
3.1.1. An employee may be immediately placed on administrative assignment pending review and resolution of the situation. Each situation will be reviewed and appropriate action initiated. Any disciplinary action shall be in concert with DFRS GO #110.13, General Disciplinary Policy and/or the Howard County Employee Manual.

3.2. Supervisors shall ensure that personnel with expired licenses/certifications are not allowed to perform in an operational status or operate any fire service vehicles without the required valid licenses, certificates and/or registrations.

Approved:

William F. Goddard, III
Chief

Attachment A



DEPARTMENT OF FIRE AND RESCUE SERVICES

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DFRS LEADERSHIP EDUCATION AND DEVELOPMENT: OBJECTIVE AND BASIS FOR THE PROGRAM Update 2012-04-20

The objective of the Howard County Department of Fire and Rescue's (DFRS) Leadership, Education, Assessment, and Development (LEAD) program's Officer Certification & Development Objectives is to increase the effectiveness of leadership within our organization by defining specific and available objectives for officer development. These pathways include a broad set of both required and preferred elements that are important to being a good leader throughout the coming decade. It is the intention of the Department to incorporate these defined objectives into the promotional requirements for officer positions within the career department.

The concept of these charts is six pills is built atop a foundation, in this case with three steps. The three steps, for DFRS, represent knowledge that builds the foundation for the organization (basic skills, advanced skills, and ethics & core values). The six pills represent core areas that are each essential to being a well-rounded officer and organizational leader (Tactical/Ops, Incident Command, Mentorship, Management, Commitment to the Organization, and Academics). The symbolism was chosen to communicate that, with a good foundation and strong pillars, our organization can withstand all challenges and stand strong forever.

There are several important documents that have served as guiding forces for the development of this OFFS program. Extensive efforts have been made to maintain consistency with the recommendations contained in the below resources. Each is based on a significant body of research and analysis of the levels of decision making and required leadership, and compared both public and private sector factors. Together they provide a reliable basis for program development. These documents are at the core of a consensus standard for fire service officer development:

- NFPA 1021 Standard for Fire Officer Professional Qualifications, 2009 Edition developed by National Fire Protection Association
- Current Howard County Job Descriptions and classification plan
- International Association of Fire Chiefs (IAFC) Officer Development Handbook
  - The pyramid contained in their document is the FESHE outline, explained below. The document is the result of a three-year work effort of the IAFC Professional Development Committee. The committee went to great lengths to meld diverse points of view. The basis for their vision came from the recurrent Wingspread conferences, where top fire-service leaders convene every ten years to address the need for professional development of future leaders so there is capacity for continued development and management of fire service organizations and capacity for fire service leaders to be credible community policy makers.
- Fire & Emergency Services Higher Education (FESHE) curriculum model
  - The U.S Fire Administration's effort to establish a strategic direction for a collaborative process involving the fire service professional development community to develop a national model for an integrated system of professional development and higher-education, in order to ensure that future fire service leaders are developed to be a well-trained and academically-educated local and national protective resource.

As always, local factors must be, and were, considered. It is imperative to DFRS that an adequate pool of qualified applicants for each rank be available for promotional consideration. The number of qualified applicants for promotion is still fairly small at the higher ranks, and the required specialization for many of the higher positions, and the quantity of specialized education and experience needed to effectively fill those positions, continues to grow, making the pool even smaller.

In consideration of the increased education and experience outlined in this program, the recommended implementation dates for these objectives to become required promotional elements are as follows:

- Candidates for Lieutenant and Captain, November 1, 2016.
- Candidates for Battalion Chief and Assistant Chief, the 2017 promotional process.

DEPARTMENT OF FIRE AND RESCUE SERVICES

GENERAL ORDER
100.04

Update 2012-04-20

Note Regarding Proposed Academic Education Requirements: In these DFRS Officer Certification & Development Objectives, the recommended academic requirements have been reduced a step from the IAFC and FESHE recommendations. This was done as it was felt that the DFRS qualified pool would be unacceptably small otherwise. The wisdom of this effort to increase the number of qualified applicants will need to be regularly evaluated, as the clear trend is for greater education with many of the higher-ranked positions.

RANK	CURRENT	PROPOSED	NATIONAL MODEL
Lieutenant	*15 college semester credits*	*45 matriculated semester credits * (or 67 quarterly credits)*	
Captain	*30 college semester credits*	*Associates degree ** (usually 60 semester or 90 quarterly credits) OR Active student in a four-year degree program WITH 75 semester-based credits (or 115 quarter-based credits)*	*Associates degree*
Battalion Chief	*60 college semester credits*	*90 matriculated semester credits * (or 135 quarterly credits)*	*Bachelor's degree*
Assistant Chief	*90 college semester credits*	*Bachelor's degree ** (usually 120 semester or 180 quarterly credits)*	*Master's degree*

**College credits matriculated at a Regionally Accredited Post-Secondary institution* ***Degree from a Regionally Accredited Post-Secondary institution*

Regarding the academic college credits, to provide one example of what is possible, in 2011, one nationally accessible online university (that is a regionally accredited post-secondary institution) evaluated the current DFRS Trainee Class curriculum and has indicated they would transfer 40 of 90 required quarter-based credits for an AA degree (they use a quarterly credit system), with most of those credits being used to satisfy their degree electives. That equates to about 26 semester-based credits, or ***44% of the credits required for the AAS Degree, right out of the Academy***. To provide a further example of what is possible, that university also evaluated a MFRI spread of classes that a Captain candidate might have for 51 of 181 required quarter-based credits towards their BA degree, with most of those credits being used to satisfy their degree electives. This is roughly equivalent to 34 semester credits, or ***28% of the credits required for a Bachelor's Degree***. There may be potential for even a few more credits with some negotiation between the prospective student and the institution. Other institutions offer similar, if not more advantageous, credit transfer scenarios.

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100.04

Update 2012-04-20

Note Regarding Proposed Length of Service/Experience Requirements: In these DFRS Officer Certification & Development Objectives, the recommended length-of-service requirements have been increased over what is currently required. However, in efforts to avoid an unacceptably small qualified pool, some officer years-of-experience requirements were kept on the shorter side, but still within the recommended range, of the IAFC recommendations. The current job classification for Assistant Chief also addresses this same issue by allowing a Captain to be minimally eligible for Assistant Chief. To avoid an unacceptably small qualified pool and address the need for increased specialized education at this rank, the included recommendation is to continue this strategy. *The included recommendations still represent a meaningful increase over currently required years of experience:*

RANK	CURRENT	PROPOSED	NATIONAL MODEL
Lieutenant	*4 years to be a Lieutenant*	*4 years credible service classified as a HCDFRS Firefighter (5.5 total years)*	*3-5 years as a qualified responder*
Captain	*5 years (1 year as a Lieutenant)*	*2 years credible service classified as a HCDFRS Firefighter Lieutenant (7.5 total years)*	*5-9 years (2-4 years as a Lieutenant)*
Battalion Chief	*6 years (1 year as a Captain)*	*3 years credible service classified as a HCDFRS Fire Captain (10.5 total years)*	*8-12 years (3-5 years as a Captain)*
Assistant Chief	*6 years (1 year as a Captain)*	*7 years at the level of a HCDFRS Fire Captain and/or at the level of a HCDFRS Battalion Chief (14.5 total years)*	*12-16 years (4 years as a BC)*

DEPARTMENT OF FIRE AND RESCUE SERVICES

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DFRS LEADERSHIP EDUCATION AND DEVELOPMENT: OFFICER CERTIFICATION & DEVELOPMENT OBJECTIVES OVERVIEW Update 2012-04-20

There are two areas of the LEAD program's Officer Certification & Development Objectives:

- Required Officer Elements
- Preferred Officer Elements

The Required Officer Elements chart outlines the courses and elements that will be absolutely required for promotion. There were several considerations in choosing which items are to be absolutely required. It is very important that our personnel have adequate opportunities to attend and complete these elements, that the completion can be absolutely verified, and that the curriculum or content of these elements will be stable over the medium term. For the most part, elements in this section are certifiable (by the Maryland Fire Service Professional Qualifications Board and/or the Pro Board). Courses with an established and stable curriculum are also suitable.

The Preferred Officer Elements must still be established, but can be more flexible. These are measurable courses or projects that DFRS declares as valuable for the specific officer rank. Personnel desiring to attain those ranks would be guided toward these elements, and opportunities provided. Consideration of whether they achieved them or not may be afforded during the interview process for promotion, as there is now be a defined educational and experience matrix upon which objective comparisons can be made. It is in this section where specific local option or locally developed content is included, including non-certifiable content that might be considered "Officer Candidate School", and training such as RMS, iMobile, HR situations, Department Policy, Staff Studies (structured analysis of department issues with proposed solutions), etc.

Included in the section are requirements to complete Staff Study reports, one at each rank. The staff study report is a constructive problem-solving model that is used by many organizations. As stated in the U.S. Air Force's *Joint Staff Officer's Guide*, "Since the purpose of a staff is to assist the commander in the exercise of command, the work of the staff revolves around the solution of problems... The staff study is one of the more flexible problem-solving procedures available to a staff." The process of authoring a staff study report will guide participants to research a departmental challenge to clearly identify issues, develop and evaluate alternatives, and recommend effective action based on relevant facts. The result is a document that can be used as a briefing in the decision-making process for the Department. These projects will serve to reinforce the commitment to improving the organization through positive contribution and constructive problem-solving, and to foster an informed perspective for issues in all areas of the organization.

LEAD Officer Certification & Development Objectives – Required Officer Elements

These elements are absolutely required to be eligible for promotion

	Tactical & Ops	Incident Command	Mentorship	Management	Commitment to Organization	Academics
AC Exec	DFRS Experience: 7 yrs as CAP and/or BC[2]			*Fire Officer IV OR EFO certificate (N) OR CFO designation (CFSE)		Bachelor's Degree[1]
BC Admin	DFRS Experience: 3 yrs service as CAP[2]			*Fire Officer III *Fire Inspector II Course – Leadership III (N)		90 semester-based credits[1] (or 135 quarter-based credits)
CAPT Managing	DFRS Experience: 2 yrs service as LT[3] Course – Building/Const-NonComb (M) Course - Decision Making for ICO (W) Course - Preparation for ICO (W) Course - Strategy-Tact for ICO (M)	ICS-400 Advanced ICS[4] ICS-701.a MACS ICS-702.a PIO ICS-703.a Resource Mgmt ICS-704 Communications	*Fire Service Instructor II	*Fire Officer II Course – Leadership II (N)		1) Associate's Degree[1] OR 2) 75 semester-based credits[1] (or 115 quarter-based credits) WITH Active student in a four-year degree program[7]
LT Single Resource Officer	DFRS Experience: 4 yrs service as FF[3] *Inc Safety Officer – Fire Supp *Inc Safety Officer – EMS *Inc Safety Officer – Tech Rescue *Fire App Driver Operator – Pump *Fire App Driver Operator - Aerial Course – Building/Const-Comb (M)	ICS-300 ICS[5] ICS-400 Response Framework	*Fire Service Instructor I	*Fire Officer I *Fire Inspector I *EMS Officer I Course – Leadership I (N)		45 semester-based credits[1] (or 67 quarter-based credits)
FF	Probationary Firefighter Curriculum (D)					
FFR	*Trainee Academy Curriculum* *EMT-B State License* *Firefighter II *HazMat Ops *Rescue Tech VMR Course – Rescue Tech CS	ICS-100 Intro ICS[5] ICS-200 Single Resource[5] ICS-700 Intro NIMS				

*(Curriculum Guide D-DFRS M-MFRI N-NFA) EFO-Executive Fire Officer (NFA) CFO-Chief Fire Officer (CFSE) * Denotes MD state (MFSPQB) or national (NAQS, IFSAC, or DOD IFSAC) certification required.*

[1] *4 years credible service classified as a MCDFRS Firefighter (5.5 total years)* [2] *2 years credible service classified as a MCDFRS Firefighter Lieutenant (7.5 total years)*

[3] *3 years credible service classified as a MCDFRS Fire Captain (10.5 total years)* [4] *7 years service at the level of a MCDFRS Fire Captain and/or at the level of a MCDFRS Battalion Chief (14.5 total years)*

[5] Equivalents are listed in Footnote 1. [6] *Degree from (or college credits matriculated through) a Regionally Accredited Post-Secondary Institution.*

[7] *Evidence of active student status in a four-year degree program at a Regionally Accredited Post-Secondary Institution required.*

Ethics & Core Values Commitment
Advanced Skills (EMT-Paramedic State License, Special Ops Technician Courses, MICRB certification, or other specialized focus.)
Minimum Operational Skill Set (Training Academy Curriculum and Probationary Year Curriculum)
FOUNDATION FOR ALL PROVIDERS

Attachment A: General Order 100.04 Update 2012-04-20

LEAD Officer Certification & Development Objectives - Preferred Officer Elements

These courses and elements are required to maintain compliance with the LEAD Officer Certification & Development Objectives, but not absolutely required for promotion.

	Tactical & Ops	Incident Command	Mentorship	Management	Commitment to Organization	Academics
AC Exec		#Exec Analysis EOC Fire Ops (N) #All-Haz IMT (M)		Course - Leading Diverse Communities Beyond Conflict (M)		Master's Degree***
BC Admin		#Command & General Staff (N) #Unified Command (M)		Any Required Elements for AC *Public Information Officer Course - FD Equal Op Officer II (M)	DFRS Senior Officer Development Program Completion (D) Two years assigned in an organizational support position. ## Two years assigned as a company officer in an operational position. ## Strategic Planning Staff Study 3 ###	*Required Elements for AC*
CAPT Managing	EmRespTerror: Strategy (M) EmRespTerror: Tactics (M)		DFRS Preceptor or Mentor CPR Instructor *Public Educator I	*Any Required Elements for BC* *Fire Investigator I Course - FD Equal Op Officer I (M) Course - Managing in a Changing Env (M)	Strategic Planning Staff Study 2 ###	*Required Elements for BC*
LT Single Resource Officer	*Any Required Elements for Captain* *Advanced Skill Set of Some Kind* Driver's License for Heavy Vehicle operation [1]		*Any Required Elements for Captain*	*Any Required Elements for Captain*	DFRS Officer Candidate Program Completion (D) Strategic Planning Staff Study 1 ###	*Required Elements for Captain*
FF						
FFR						

*(Curriculum Guide D–DFRS M–MFRI N–NFA) * Denotes Maryland state (MFSPQB) or national (NFQS, IFSAC, or DOD IFSAC) certification required.*
***Degree from a Regionally Accredited Post-Secondary Institution. [1] See Footnote 3 # Department may facilitate training.*
As determined by the Fire Chief ### Over the three reports, topics must address one issue in each area: All-Hazard Ops, EMS Ops, and Support Services

Ethics & Core Values Commitment
Advanced Skills (EMT-Paramedic State License, Special Ops Technician Courses, MICRB certification, or other specialized focus)
Minimum Operational Skill Set (Training Academy Curriculum and Probationary Year Curriculum)
FOUNDATION FOR ALL PROVIDERS

Attachment A, General Order 100.04

Update 2012-04-20

Footnote 1: Maryland Emergency Management Agency (MEMA) Accepted NIMS Equivalents

Update 2012-04-20

ICS-300: R317 or N317 or O317 - Command and General Staff Functions for Local Incident Management Teams

Footnote 2: Overview of NIMS ICS Courses

IS-100, Introduction to ICS (On-Line, few hours, or can be taught in the classroom and tested On-Line, half day)
IS-200, ICS for Single Resources (On-Line, few hours or can be taught in the classroom and tested On-Line, half day)
IS-700, National Incident Management System (On-Line, few hours or can be taught in the classroom and tested On-Line, half day)
IS-701.a, NIMS Multiagency Coordination System (MACS) (On-Line, few hours)
IS-702.a, NIMS Public Information Systems (On-Line, few hours)
IS-703.a, NIMS Resource Management (On-Line, few hours)
IS-704, NIMS Communication and Information Management (On-Line, few hours)
IS-800, National Response Plan, An Introduction (On-Line, few hours or can be taught in the classroom and tested On-Line, half day)
ICS-300, Intermediate ICS for Expanding Incidents (Classroom Only, 3 Days)
ICS-400, Advanced ICS for Command and General Staff (Classroom Only, 2 Days)

Footnote 3: Driver's License Requirements

1. Drivers license must be state issued and allow driver operation of fire apparatus up to 80,000 pounds as provided for by Maryland law.

General Order 100.17: Standard of Coverage

DEPARTMENT OF FIRE AND RESCUE SERVICES

GENERAL ORDER

100.17

Originating From	Issue Date	Revision Date	Attachments
Administration	**1/19/2006**	**N/A**	**A**

SUBJECT: **Standard of Coverage**
APPLICABILITY: **All Personnel**

POLICY:
The Howard County Department of Fire and Rescue Services (DFRS) Standard of Coverage document defines the service level objectives of the Department's response to fire and non-fire emergencies.

1 THE STANDARD OF COVERAGE SPECIFICALLY DISCUSSES THE FOLLOWING TYPES OF EMERGENCY RESPONSES:

- 1.1 Emergency Medical Service response
- 1.2 Non-Structural Fire response
- 1.3 Structural Fire response
- 1.4 Hazardous Materials response
- 1.5 Technical Rescue response

Approved:

Joseph A. Herr
Fire Chief

Howard County
Department of Fire and Rescue Services

Standard of Coverage

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GENERAL INFORMATION

Howard County's geographical boundaries are established as part of state and local laws. There is a General Plan, an online geographic information system (GIS), and online Census information, all containing relevant data pertaining to development of organizational goals and objectives. Historical incident data, including computer-aided dispatch (CAD) information – from 1996 though current day and occupancy information are collected and maintained through the Fire Records Management System (FRMS). Additionally, the Department reviews data produced by the HC Economic Development Authority, HC Planning and Zoning, as well as other sources as appropriate. Periodic reports are produced from the various data sources available to the Department. The Department has acquired several software packages specifically designed to analyze Standard of Coverage Performance. They are Deccan International's CAD Analyst and Fire ADAM (Fire Apparatus Deployment and Management).

The Department analyses information relating to community experiences and projected changes in demographics. Risks are identified in accordance with the established criteria and appropriate response plans are developed. CAD response plans have been defined by incident type and have also been established for specific occupancies or areas as appropriate.

The Department has established two major planning zones the Metro and Rural districts. These are distinguished by the availability of public water and by the fire tax rate that is applied to real and personal property. The Department has further subdivided the planning zones into operational response areas of smaller units (from largest to smallest): 1) Battalion 1 and Battalion 2; 2) 134 box areas; and 3) 1,183 fire response zones (FRZ). Based upon conditions within each FRZ, we have assigned a level of fire and non-fire risks - High, Medium or Low.

Risk assessments have been performed for EMS responses, fire responses, hazardous materials responses, and technical rescue responses. These assessments are periodically reviewed and updated as appropriate.

Howard County Department of Police are responsible for the County's Public Safety Answering Point (PSAP / 911) as well as Fire and Rescue dispatch operations. The Department of Police uses Emergency Medical Dispatch (EMD) as required by Maryland for handling the receipt and entry of emergency medical calls. Fire and Rescue provides a liaison to work with the Department of Police to assure Fire and Rescue needs are properly addressed.

Staffing on Department apparatus is as follows:

- Special Services – includes aerial apparatus, squads: four (4) personnel
- Extrication Unit – includes aerial apparatus with extrication equipment, squads, and rescues: four (4) personnel
- Engines: three (3) personnel
- Tankers – unit carrying 1,500 gallons or greater of water: two (2) personnel
- EMS Transport Units : two (2) personnel
- Chief Officers and Staff Personnel: one (1) personnel

EMS RESPONSE

Standard EMS Response

The Standard of Care provided by the Department for Advanced Life Support (ALS) incidents within Howard County is Emergency Medical Technician – Paramedic (EMT-P) (DOT Standard). The Standard of Care provided by the Department for Basic Life Support (BLS) for incidents within Howard County is Emergency Medical Technician – Basic (EMT-B).

To address the EMS needs of Howard County, Fire & Rescue has developed several EMS dispatch categories. Each category receives a different response level. Only the minimum response levels are listed. The Incident Commander has full authority to request any equipment they deem necessary to contain such incidents. They are as follows:

- Basic Life Support – one BLS Transport unit
- Advanced Life Support – one ALS Transport unit
- Advanced Like Support with Assist – one ALS Transport unit, one Support Piece
- Advanced Life Support Critical – one ALS Transport unit, one Support Piece, and an EMS Officer
- Rescue with Unknown Injuries – one Engine, one BLS Transport unit
- Rescue with Injuries – one Engine, one Support Piece with rescue capabilities, and one ALS Transport unit
- Rescue with entrapment – two Engines, one Rescue unit, two ALS Transport units, one Battalion Chief, and one Medical Duty Officer.

STANDARD STAFFING ON EMS RESPONSE'S

- BLS only Response 2 personnel
- ALS only Response 2 personnel
- ALS with Support 5 personnel
- ALS Critical Response 6 personnel

STANDARD STAFFING ON RESCUE RESPONSE'S

- Rescue Unknown Injury(s) 5 personnel
- Rescue with Injury(s) 8 personnel
- Rescue with Entrapment 16 personnel

*** Totals may vary due to volunteer and staff response**

All non-EMS response units - fire engines, squads, and aerial apparatus - are equipped with Automated External Defibrillators (AED). Staff vehicles are equipment with AEDs as necessary.

At least one fire engine, squad, or aerial unit at each station is equipped with ALS equipment. These units are staffed with ALS providers as required to meet service needs.

Standard of Coverage for EMS Incidents

Performance measurement is from time call is first created in CAD – either ANI/ALI time stamp or Time Create time stamp. Goal is 80% of the time or better.

C/P	Performance Measure	Metro	Rural
P	(A) 911 Call Processing Receipt to Entry	<= 01:30	<= 01:30
P	(B) 911 Call Processing Entry to Dispatch	<= 00:30	<= 00:30
C	(C) 911 Total Processing Time	<= 02:00	<= 02:00
C	(D) First Unit Turnout	<= 02:30	<= 04:30
P	(E) First Unit on Scene	<= 10:00	<= 12:00
C	(I) First BLS on Scene	<= 10:30	<= 14:00
C	(J) First ALS on Scene	<= 10:30	<= 14:00
P	(K) First Transport on Scene	<= 11:00	<= 15:30
P	(L) First Unit-on-scene travel time	<= 06:45	<= 09:00
C	(M) First ALS APS	<= 12:00	<= 15:30
C	(N) First BLS APS	<= 12:00	<= 15:30
P	(S) To Hospital Transport Time	<= 13:00	<= 19:00
P	(0) BLS EMS-Call Time Spent at Scene	<= 18:00	<= 18:00
P	(1) ALS EMS-Call Time Spent at Scene	<= 18:00	<= 18:00

EMS Risk Classification Criteria

The following risk levels – High, Medium and Low – are for data analysis and planning purposes.

- *HIGH* Occupancies that have a potential for high acuity level of patients or fall under high usage (150 calls per year). Examples are hospitals, nursing homes, high rise structure (4 or greater stories), penal institutions and multiple assisted living facilities located in close proximity to each other.
- *MEDIUM* FRZ's that contain occupancies that house, accommodate or have the potential for sick or injured persons with a lesser acuity level or fall under medium usage 35-150 calls per year. This would include places such as schools, public assemblies, apartment complexes and isolated assisted living facilities.
- *LOW* Areas not meeting the description of high or medium. This would be the typical residential areas, business parks, and rural areas.

NON-STRUCTURAL FIRE RESPONSE

Standard Non-Structure Fire Response

Brush and Grass Fires

The frequency of large brush and grass fires continues to decline in Howard County. This is due, primarily, to the rapid growth that the County is experiencing. The growth has left less open space. A minimum response to a call of this nature is one engine and one brush vehicle. The Incident Commander has full authority to request any equipment they deem necessary to manage such incidents.

Vehicle Fires

Howard County has two major interstates, I-95 and I-70, which run through large areas of the County. There is also an extensive network of primary and secondary roads within the County. The Department handles passenger vehicle fires with an approximate annual loss of $1,000,000. Non-interstate response to a passenger vehicle fire is one engine. The interstate response for a passenger vehicle is two engines. Response to larger conveyances – not involving hazardous materials, such as recreational vehicles, tractor-trailers, and the like, is two engines. The Incident Commander has full authority to request any equipment they deem necessary to contain such incidents.

Miscellaneous Alarms

The Department responds to a multitude of miscellaneous alarms types to meet the needs of the community. Miscellaneous alarms include, but are not limited to, the following: lockouts/ins; inside flooding conditions; unusual odors; smoke and CO detector questions and replacements; the assisting of our elderly residents; and alarm system malfunctions. Although this list consists of only a small part of our miscellaneous alarm types, miscellaneous incidents are handled in a timely, professional manner.

STRUCTURAL FIRE RESPONSE

Standard Structural Fire Response

Howard County Fire and Rescue is divided into two major response areas. These areas are known as the rural and metro regions. A key difference between the two areas is the availability of water. Within in the Metro region there is a public water system (hydrant), within the Rural region there is no public water system. Fire response into these areas acknowledges the availability of a public water system or lack thereof. In the Rural area, Fire and Rescue maintains a list of available water sources so responding unit can rapidly establish a water supply system. Structural fire response is broken down into two (2) categories: Residential Structures (Single family dwelling, wood frame construction); and Multi-Residential and Commercial Structures.

Residential Structures

Equipment and Response:

Unit Type	**Metro**	**Rural**
Engines	4 (12 personnel)	4 (12 personnel)
Special Services	2 (8 personnel)	2 (8 personnel)
Aerial	1 (4 personnel)	1 (4 personnel)
Water Tankers		2 (4 personnel)
Transport unit	1 (2 personnel)	1 (2 personnel)
Battalion Chief	1 (1 personnel)	1 (1 personnel)
Personnel Totals	*27 personnel*	*31 personnel*

Task Analysis: Fireground Operations

Task	**Metro**	**Rural**
Fire Attack Line	2 personnel	2 personnel
Backup Line	2 personnel	2 personnel
R.I.T	4 personnel	4 personnel
Search & Rescue	2 personnel	2 personnel
Pump Ops/Water Supply	4 personnel	8 personnel
Tower Operations	2 personnel	2 personnel
Ground Ladders	2 personnel	2 personnel
Ventilation / Utilities	2 personnel	2 personnel
Safety	1 personnel	1 personnel
Incident Command	1 personnel	1 personnel
FF Rehab	2 personnel	2 personnel
EMS / Patient Care	2 personnel	2 personnel
Personnel Totals	*26 personnel*	*30 personnel*

Multi-Residential and Commercial Structures

Equipment and Response:

Unit Type	Metro	Rural
Engines	4 (12 personnel)	4 (12 personnel)
Special Services	1 (4 personnel)	1 (4 personnel)
Aerial	2 (8 personnel)	2 (8 personnel)
Water Tankers		2 (4 personnel)
Transport unit	1 (2 personnel)	1 (2 personnel)
Battalion Chief	1 (1 personnel)	1 (1 personnel)
EMS Officer	1 (1 personnel)	1 (1 personnel)
Personnel Totals	*28 personnel*	*32 personnel*

Task Analysis: Fireground Operations

Task	Metro	Rural
Fire Attack Line	2 personnel	2 personnel
Backup Line	2 personnel	2 personnel
R.I.T	4 personnel	4 personnel
Search & Rescue	2 personnel	2 personnel
Pump Ops/Water Supply	4 personnel	8 personnel
Tower Operations	4 personnel	4 personnel
Ground Ladders	2 personnel	2 personnel
Ventilation / Utilities	2 personnel	2 personnel
Safety	1 personnel	1 personnel
Incident Command	1 personnel	1 personnel
FF Rehab	2 personnel	2 personnel
EMS / Patient Care	2 personnel	2 personnel
Personnel Totals	*28 personnel*	*32 personnel*

Standard of Coverage for Structural Fire Incidents

Performance measurement is from time call is first created in CAD – either ANI/ALI time stamp or Time Create time stamp. Goal is 80% of the time or better.

C/P	Performance Measure	Metro	Rural
P	(A) 911 Call Processing Receipt to Entry	<= 01:30	<= 01:30
P	(B) 911 Call Processing Entry to Dispatch	<= 00:30	<= 00:30
C	(C) 911 Total Processing Time	<= 02:00	<= 02:00
C	(D) First Unit Turnout	<= 02:30	<= 04:30
P	(E) First Unit on Scene	<= 10:00	<= 12:00

Howard County Department of Fire and Rescue Services

Standard of Coverage

C/P	Performance Measure	Metro	Rural
C	(F) First Engine on Scene	<= 11:00	<= 14:00
P	(G) First Tower on Scene	<= 12:30	<= 15:00
P	(H) First Squad on Scene	<= 12:30	<= 15:00
P	(L) First Unit-on-scene travel time	<= 06:45	<= 09:00
C	(O) Init Atk (1E+5Pers) Low Haz	<= 11:30	<= 14:30
C	(P) Init Atk (1E+5Pers) Med Haz	<= 11:30	<= 14:30
C	(Q) Init Atk (1E,1T+8Pers) High Haz	<= 14:00	<= 18:30
P	(R) First Chief	<= 14:00	<= 18:00
C	(T) EFF(E,14Pers)	<= 18:00	
C	(V) EFF(E,14Pers,6Water)		<= 22:00

Fire Risk Classification Criteria

The following risk levels – High, Medium and Low – are for data analysis and planning purposes.

- *HIGH* High life hazard occupancies (hospital, nursing home); chemical processing industries, significant quantities of hazardous chemicals, high dollar value, high rise buildings, high historical value, penal institutions
- *MEDIUM* Response history indicates an incident volume exceeding 150 calls per year, schools, general industrial parks, public assembly, apartment complexes, condominiums, senior assisted living units.
- *LOW* Rural (farms, open space), single family residences, townhouses, not otherwise classified.

HAZARDOUS MATERIALS RESPONSE

Standard Hazardous Material Response

Howard County has two major interstates, I-95 and I-70, which run through large areas of the County. All Fire and Rescue personnel are trained at the Hazardous Material Operations level in compliance with NFPA 472. Fire Station 10 houses our special operations (SO) personnel and equipment. There are a minimum of 9 hazardous materials technicians on-duty 24 / 7. All Hazardous Materials incidents include the response of SO. Mutual aid and off-duty resources can be requested as necessary. The SO team has two (2) specialized vehicles carrying equipment appropriate to handle a variety of hazardous material incidents. Hazardous materials training and re-certification is done following NFPA guidelines.

Response to all hazardous materials incidents includes the assignment of the closest engine company for initial size-up and actions. Mutual aid resources are available in the event Department's Special Operations team is unavailable.

S.A.R.A II helps assure that Fire and Rescue receive this information through our Emergency Management Office. Furthermore, L.E.P.C requires a periodic survey of the number of conveyances that carry Hazardous Materials through our county. This information assists Fire and Rescue in developing response plans for potential hazardous materials incidents.

Fire and Rescue categorizes hazardous material incidents in into three (3) levels.

- Level One – low risk
- Level Two – moderate risk
- Level Three – High risk

To address the needs of Howard County, Fire & Rescue has developed several hazardous materials dispatch categories. Each category receives a different response level. Only the minimum response levels are listed. They are as follows:

- Suspicious Package – Special Operations (ESV, one SO Engine, one SO aerial and one SO ALS transport unit), one Engine, one Battalion Chief

- Hydrocarbon Spill > 50 gallons - Special Operations (ESV, one SO Engine, one SO aerial and one SO ALS transport unit), two Engines

- Crash with HAZ-MAT - Special Operations (ESV, one SO Engine, one SO aerial and one SO ALS transport unit), one Extrication Unit, four Engines, one Special Service, two ALS Transport units, one Medical Duty Officer, one Battalion Chief, one Foam unit, one Tanker, one Safety Officer

- Confirmed HAZ -MAT with/without Fire or Rail Car Leak with/without Fire – Special Operations (ESV, one SO Engine, one SO aerial and one SO ALS transport unit), four Engines, one Special Service, two ALS Transport units, one Medical Duty Officer, one Battalion Chief, one Foam unit, one Tanker, one Safety Officer.

The Incident Commander has full authority to request any equipment they deem necessary to contain such incidents.

Standard of Coverage for Hazardous Material Incidents

Performance measurement is from time call is first created in CAD – either ANI/ALI time stamp or Time Create time stamp. Goal is 80% of the time or better.

C/P	Performance Measure	Metro	Rural
P	(A) 911 Call Processing Receipt to Entry	<= 01:30	<= 01:30
P	(B) 911 Call Processing Entry to Dispatch	<= 00:30	<= 00:30
C	(C) 911 Total Processing Time	<= 02:00	<= 02:00
C	(D) First Unit Turnout	<= 02:30	<= 04:30
P	(E) First Unit on Scene	<= 10:00	<= 12:00
C	(F) First Engine on Scene	<= 11:00	<= 14:00
P	(L) First Unit-on-scene travel time	<= 06:45	<= 09:00
P	Special Ops On-Scene Hazmat	<= 19:00	<= 19:00

Hazardous Materials Risk Classification Criteria

The following risk levels – High, Medium and Low – are for data analysis and planning purposes.

- *HIGH* Facilities or areas where safety to people is first consideration because of the nature and/or volume of the hazardous material involved, and public action is required (Evacuation or shelter-in-place population protection. Facilities or areas with reportable substance under SARA Title III).

- *MEDIUM* Hazardous Materials are involved which pose a potential threat to life and property, and planning for public actions is considered. Petroleum transfer stations and major thoroughfares.

- *LOW* Areas where public action is considered unlikely and the incident can be handled by a minimum number of responding agencies. No known hazard exists.

Hazardous Material risks levels are assigned to each FRZ based on information provided by HC GIS, a review of fixed hazardous materials sites reportable under requirements of SARA Title III and evaluation by members of the Special Operations team.

TECHNICAL RESCUE RESPONSE

Standard Technical Rescue Response

All Fire and Rescue personnel are provided training necessary to respond to technical rescue incidents to perform size-up and initiate appropriate actions. Fire Station 10 houses our special operations (SO) personnel and equipment. There are a minimum of 9 technical rescue personnel on-duty 24 / 7. All Technical Rescue incidents include the response of SO. Mutual aid and off-duty resources can be requested as necessary.

SO personnel are trained in the following technical rescue disciplines: confined space, swift water operations, rope systems, overland search, ice rescue, trench rescue, structural collapse and technical vehicle and machinery rescue. All SO members must be compliant with NFPA 1670, Standard on Operations and Training for Technical Rescue. The SO team has two (2) specialized vehicles carrying equipment to handle a variety of technical rescue incidents.

Response to all technical rescue incidents includes the assignment of the closest engine company for initial size-up and actions. Mutual aid resources are available in the event Department's Special Operations team is unavailable.

To address the needs of Howard County, Fire & Rescue has developed several technical rescue dispatch categories. Each category receives a different response level. Only the minimum response levels are listed. They are as follows:

- Water Rescue– one S.O. Unit, one S.O. Engine, one S.O. Aerial, one Engine, one S.O. ALS transport unit, one Safety Officer, one ALS transport unit, one Medical Duty Officer, one Battalion Chief, one Boat, one Dive Team and one Special Service.

- Confined Space- S.O. Unit, one S.O. Engine, one S.O. Aerial, two Engines, one S.O.ALS transport unit, one Safety Officer, one ALS transport unit, one Medical Duty Officer ,one Battalion Chief, one BLS Transport unit and one Special Service.

- Trench Rescue - S.O. Unit, one S.O. Engine, one S.O. Aerial, two Engines, one S.O.ALS transport unit, one Safety Officer, one ALS transport unit, one Medical Duty Officer ,one Battalion Chief, one BLS Transport unit and one Special Service.

- Structural Collapse - S.O. Unit, one S.O. Engine, one S.O. Aerial, two Engines, one S.O.ALS transport unit, one Safety Officer, one ALS transport unit, one Medical Duty Officer ,one Battalion Chief, one BLS Transport unit and one Special Service.

- Technical Rescue - S.O. Unit, one S.O. Engine, one S.O. Aerial, two Engines, one S.O.ALS transport unit, one Safety Officer, one ALS transport unit, one Medical Duty Officer ,one Battalion Chief, one BLS Transport unit and one Special Service.

The Incident Commander has full authority to request any equipment they deem necessary to contain such incidents.

Standard of Coverage for Technical Rescue Incidents

Performance measurement is from time call is first created in CAD – either ANI/ALI time stamp or Time Create time stamp. Goal is 80% of the time or better.

C/P	Performance Measure	Metro	Rural
P	(A) 911 Call Processing Receipt to Entry	<= 01:30	<= 01:30
P	(B) 911 Call Processing Entry to Dispatch	<= 00:30	<= 00:30
C	(C) 911 Total Processing Time	<= 02:00	<= 02:00
C	(D) First Unit Turnout	<= 02:30	<= 04:30
P	(E) First Unit on Scene	<= 10:00	<= 12:00
C	(F) First Engine on Scene	<= 11:00	<= 14:00
P	(L) First Unit-on-scene travel time	<= 06:45	<= 09:00
P	Special Ops On-Scene Technical Rescue	<= 22:00	<= 22:00

Technical Rescue Risk Classification Criteria

The following risk levels – High, Medium and Low – are for data analysis and planning purposes.

- *HIGH* Rescues involving recreational static water (large lakes and ponds), moving water (rivers), rugged terrain (parks), super structures (radio and water towers) and all railways within the county which could pose a high hazard for a technical rescue.
- *MEDIUM* This would include smaller lakes and ponds, the interstate highways, and power line transmission towers which pose a potential threat to life and property
- *LOW* All other areas fall into this category. These areas pose a low hazard and are unlikely to cause fire department action.

Technical Rescue risks levels are assigned to each FRZ based on information provided by HC GIS and evaluation by members of the Special Operations team.

APPENDIX A – PERFORMANCE MEASURES

C/P	Performance Measure	Metro	Rural
P	(A) 911 Call Processing Receipt to Entry	<= 01:30	<= 01:30
P	(B) 911 Call Processing Entry to Dispatch	<= 00:30	<= 00:30
C	(C) 911 Total Processing Time	<= 02:00	<= 02:00
C	(D) First Unit Turnout	<= 02:30	<= 04:30
P	(E) First Unit on Scene	<= 10:00	<= 12:00
C	(F) First Engine on Scene	<= 11:00	<= 14:00
P	(G) First Tower on Scene	<= 12:30	<= 15:00
P	(H) First Squad on Scene	<= 12:30	<= 15:00
C	(I) First BLS on Scene	<= 10:30	<= 14:00
C	(J) First ALS on Scene	<= 10:30	<= 14:00
P	(K) First Transport on Scene	<= 11:00	<= 15:30
P	(L) First Unit-on-scene travel time	<= 06:45	<= 09:00
C	(M) First ALS APS	<= 12:00	<= 15:30
C	(N) First BLS APS	<= 12:00	<= 15:30
C	(O) Init Atk (1E+5Pers) Low Haz	<= 11:30	<= 14:30
C	(P) Init Atk (1E+5Pers) Med Haz	<= 11:30	<= 14:30
C	(Q) Init Atk (1E,1T+8Pers) High Haz	<= 14:00	<= 18:30
P	(R) First Chief	<= 14:00	<= 18:00
P	(S) To Hospital Transport Time	<= 13:00	<= 19:00
C	(T) EFF(E,14Pers)	<= 18:00	
P	(U)First Alarm (4E,T,SS,A,Ch,23Pers) Low Haz	<= 14:00	
C	(V) EFF(E,14Pers,6Water)		<= 22:00
P	(W) First Alarm (4E,2T,SS,TNK,A,Ch,MDO,24Pers) Med Haz	<= 19:00	
P	(X) First Alarm (4E,2T,SS,TNK,2A,P,Ch,MDO,32Pers) High Haz	<= 22:00	
P	(Y) First Alarm (4E,T,SS,TNK,A,Ch,24Pers) Low Haz		<= 22:00
P	(Z) First Alarm (4E,T,SS,TNK,A,Ch,MDO,25Pers) Med Haz		<= 23:00
P	(0) BLS EMS-Call Time Spent at Scene	<= 18:00	<= 18:00
P	(1) ALS EMS-Call Time Spent at Scene	<= 18:00	<= 18:00
P	Special Ops On-Scene Hazmat	<= 19:00	<= 19:00
P	Special Ops On-Scene Technical Rescue	<= 22:00	<= 22:00

C/P Column
C – Critical performance measures. These measures need to be meet 80% of the time or better.
P – Planning performance measures. These measures are used to evaluate specific areas of performance and are not required to be met 80% of the time or better.

General Order 100.19: Critical Incident Stress Management (CISM)

Howard County Department of Fire and Rescue Services

GENERAL ORDER

GENERAL ORDER 100.19

Critical Incident Stress Management (CISM)

OFFICE OF THE FIRE CHIEF

Issue Date: 1/5/2009
Revision Date: 11/13/2013

APPLICABILITY

All Personnel

POLICY

Mission

The Department will maintain a Critical Incident Stress Management (CISM) Team to deliver a CISM initiative to personnel of the Fire & Rescue Service and other Public Safety personnel who operate in Howard County. This will be accomplished via the use of a specially trained Department CISM Team which partners Behavioral Health Specialists (BHS) with Peer Support Personnel (PSP).

The CISM Team will provide pre-incident education and preparation to enhance the stress resistance of department members. The Team will provide a broad spectrum of crisis support services during and after critical incidents. Finally, when necessary, the Team will assist members in their recovery processes by means of referrals to appropriate resources.

Where appropriate, this policy meets or exceeds the recommendations identified in NFPA 1500 (Fire Department Occupations Safety & Health Program), Chapter 12 (Critical Incident Stress Program), 2007 edition. Membership will consist of a cross-section, volunteer and career, from all levels of HCDFRS and other public safety agencies that operate in Howard County. The strategic goals of the CISM program are:

- The enhancement of stress resistance in the department's member by means of stress education and preparation for traumatic exposures.
- The restoration of unit cohesion and unit performance in the aftermath of traumatic events.
- The reduction of individual distress and the restoration of personal well being.
- The facilitation of recovery processes in members who are severely impacted by a traumatic event.

DEFINITIONS

PROCEDURES

Statement of Administrative Support

The Administration of HCDFRS (the Department) recognizes that a healthy department is one in which its personnel are mentally and physically fit. The Department, therefore, endorses and supports several programs that enhance the physical and mental health of its personnel and that maintain a high level of departmental readiness. The Critical Incident Stress Management system, which provides stress education and comprehensive staff support, is one such program endorsed by the Department Administration.

Purpose

Effective management of traumatic stress involves a comprehensive, integrated, systematic, and multi-tactic approach. This is the approach of the Department CISM Team, which is comprised of peer support members of the Department, Chaplains, qualified Behavioral Health Specialists, and may include personnel from other public safety agencies. The purpose of the Team is not to provide psychotherapy or other mental health functions. Critical Incident Stress Management is not psychotherapy nor is it a substitute for psychotherapy. It is not a treatment or a cure. It is, instead, an organized, comprehensive and confidential staff support package that provides only stress management education and crisis intervention support services. The Department has the primary responsibility of providing crisis support service to the department's members following exposures to traumatic events. The Department will refer anyone needing psychological services outside of the scope of crisis intervention to appropriate professional resources.

- The Department CISM program adheres to the standards, protocols, and procedures detailed in the following books or document:
    - Everly GS, Mitchell, J.T. 2008. *Integrative Crisis Intervention*. Ellicott City, MD: Chevron Publishing Corporation.
    - Mitchell, J.T. (2004). Characteristics of Successful Early Intervention Programs. *International Journal of Emergency Mental Health,* 6 (4), 175-184.
    - Mitchell, J. T. (2007). Group Crisis Support: Why it works, When and How to provide it. Ellicott City, MD: Chevron Publishing.
    - Mitchell, J.T. and Everly, G.S., Jr., (2001). Critical Incident Stress Debriefing: An operations manual for CISD, Defusing and other group crisis intervention services, Third Edition. Ellicott City, MD: Chevron.

The purposes of the Department CISM initiative are:

- To prepare the department's personnel to resist and manage the psychological aspects of traumatic events by means of stress education and staff support. Stress resistance, however, is not only provided on an individual basis. The entire department requires stress management awareness and specific protocols to employ when disruptive and disturbing events interfere with unit cohesion and unit performance. Assistance, in the form of consultation, to the HCDFRS Administration on planning, policy and protocol development issues that relate to stress management is an important CISM Team function. To achieve the end of developing individual

and departmental stress resistance, a HCDFRS CISM Team has been formed and has received appropriate training.

- To provide a strategic and timely response to distressing "trigger" or critical incidents with a properly trained and equipped CISM Team consisting of Peer Support Personnel and Behavioral Health Specialists. ("Trigger" incidents or events are detailed in the section below entitled, "The Critical Incident").

- To apply a wide range of supportive crisis tactics that are in concert with the core principles of crisis intervention and which are provided with clinical oversight by Behavioral Health Specialists.

- To:
  - Assess the effects of traumatic events on the HCDFRS personnel
  - Make every reasonable effort to mitigate their impact
  - Reduce the symptoms of distress
  - Restore individuals or even entire units to effective performance

- To assist other emergency services organizations, upon request and as circumstances require, in minimizing the effects of traumatic stress on their personnel.

- To provide consultation, information, and ongoing staff support in large scale and prolonged events such as searches for missing subjects, multi-casualty events, hazardous materials events that are threatening the civilian community, complicated rescues, floods, or major fires.

- To contribute support services to other departments when their own CISM Teams are impaired by a highly distressing traumatic event such as a firefighter death, a disaster, or other overwhelming situation.

- To prepare to assist, when required, the federal department of Homeland Security with an appropriate response to large scale incident of national importance.

- To provide follow-up services to assure that the personnel are achieving the best possible restoration of personal wellbeing and a return to service.

- To provide links to and referrals, as required, to resources beyond the Critical Incident Stress Management (CISM) Team including, but not limited to, the Employee Assistance Program (EAP), legal advisors, Behavioral Health Specialists, and medical specialists.

The Critical Incident

A Critical Incident may be defined as "stressful events which have the potential to overwhelm one's usual coping mechanisms, resulting in psychological distress and an impairment of normal individual, as well as collective, adaptive functioning" (Everly & Mitchell, 2008).

All Department personnel are served by the CISM Team. The occurrence of certain events may trigger an automatic response from the Team. In other cases, members of the department may request assistance. Individuals may always request personal support. Unit leaders and other command personnel may request assistance for themselves, their units, or for the department in general. The on-call CISM Team Peer Support Coordinator (PSC) should be notified at the occurrence of a critical incident. The following section presents a non-exhaustive list of the types of incidents that may activate a CISM response.

- A notification of the on-call CISM Team Peer Support Coordinator may be initiated by an officer or by any member of the HCDFRS when a trigger incident or event occurs. *Examples* of trigger incidents or events may include:
  - Line of duty death (LODD) of public safety personnel
  - Serious line of duty injury of public safety personnel
  - Serious line of duty exposure to harmful contaminant (HAZ-MAT, Infectious substance/environment)
  - Death of, grotesque injury to, and/or violence to child/children
  - Threat of/or suicide or homicide of a colleague
  - Injury/Death of a civilian or emergency care worker by another emergency care provider
  - Terrorist/WMD Incident
  - Mass Casualty Incidents (MCI's)
  - Protracted incidents, such as natural disasters or special operations incidents
  - Actual or threats of physical/emotional harm (real or perceived) to an emergency care worker
  - Any meaningful event (real or perceived) affecting the emergency care provider
  - Direct observation of a traumatic event such as, a person engulfed in flames, an individual crushed to death, a violent act while in progress, or a person falling from a height.
  - The victim/observance of workplace violence
  - Multiple significant incidents within a short time frame
  - Knowing the victims involved in the incident
  - Serious injury or death of a civilian resulting from operations, e.g., collision of emergency units responding to a call
  - Loss of life following extraordinary and prolonged expenditures of physical and emotional energy during rescue efforts
  - Incidents that attract extreme, unusual or extensive media coverage
  - Incidents in which circumstances are unusually bizarre and/or trigger profound emotional reactions.

On-Scene Traumatic Stress Management

The department's officers play a crucial role in minimizing the impact of critical incident stress by limiting exposure of personnel. This is often accomplished by rotation of work crews to different assignments, by providing rest breaks for working personnel, and by relieving fatigued personnel. Unnecessary personnel should be removed from the immediate scene and stationed in a staging area or returned to their quarters as soon as reasonably possible.

In the case of protracted incidents or incidents of extreme magnitude, it is helpful to have CISM Team representative(s) on scene in a standby capacity. They should be automatically dispatched as part of a

task force assignment. In other cases, the officer in charge or a designee may request a CISM presence at the scene.

- CISM Team members serve in advisory and support capacities only. The CISM Team member at the scene is an advisor to the IC and will make no decisions or take any actions that interfere with current or future operations. Any decision or action that impacts staffing or operations must be cleared by Command. At no time will operations be curtailed in order to conduct any type of CISM intervention.

- CISM Team members will not engage in on-scene operations while functioning in an assigned CISM role, unless there are "lawful duty to act" requirements in a situation.

Team Access & Activation of the CISM Services

Access to CISM services may be made on or off duty, 24 hours a day, 365 days a year, through one of the methods noted below. These access points were developed to ensure that any user will have ease of access, anonymity, and confidentiality. Full Team CISM activation, such as may be required in a large scale disaster, will occur only after careful pre-deployment assessment and strategic planning by the CISM Team Leadership.

The Department will provide communications equipment to CISM Team participants

- Access through the Communications Supervisor on 410-313-2950 (urgent or emergency). Once requested, Communications will page the on-call CISM Peer Support Coordinator and the on-call Behavioral Health Specialist. Radio communication placing CISM Team members on the air, in service, responding, and the like are acceptable forms of CISM radio communication. To ensure confidentiality, all other CISM communication should ordinarily be conducted in person or by telephone.

- CISM Peer Support Hotline on 410-313-2476 (410-313-CISM) (non-emergency). Messages left will be returned by the on-call CISM Team Peer Support Coordinator as soon as possible. Access to these services is available to any Department member. Note-Only a valid call-back number is required; however, more information may be left if desired.

- Access services through direct contact of individual Peer Support Personnel on the CISM Team (any time, by anyone). Department members may directly contact the Peer Support Personnel of their choice if they desire to discuss a concern.

- The following information must be obtained to ensure that the Team representative may reach the requesting person for appropriate follow-up. This information will be immediately relayed to the on-call Team Peer Support Coordinator for follow-up and will be used for establishing contact and determining CISM needs.
  - Requestor's name
  - Contact name (unless anonymous)
  - Type of incident

- Number of personnel involved; or possibly affected
- Call back phone number

A supervisor/company officer who observes or believes that a member may be experiencing or exhibiting a physical or psychological response to a traumatic event should immediately consult with that individual and offer the services of one of the CISM Team members. Determining the need for actual support services is difficult for officers who have not been trained in CISM. They cannot do effective assessments. They need to encourage the person to accept the support from a CISM Team member and to assist that person in contacting a CISM Team member.

If an individual accepts the suggestion of support from a CISM Team member, the members' supervisor / company officer should assist that person in connecting with the desired services. In the event of an abnormally extreme response to a traumatic event, where in the opinion of the company officer, a person or personnel need(s) to be removed from duty, the company officer is to immediately notify the on duty Battalion Chief and proceed according to this policy. A CISM Team member should be contacted in such a case to assist in the assessment and support of the seriously impacted individual.

Under most major operations the Medical Duty Officer/Battalion Chief will serve as the party to initiate the CISM response. This is not to say, however, that others cannot do so. Often, the Incident Commander (IC), or other ranking officer, may also see the need to initiate this program for either assistance in evaluating the need, or for further CISM services.

- Any Department member may access the CISM program for themselves or out of concern for other personnel. No supervisor or commanding officer approval is required to contact the on-call Peer Support Coordinator by line personnel.

- In certain situations members of the Department may need psychological services beyond the scope of the crisis intervention support that can be provided by CISM. The on-duty CISM Peer Support Coordinator should consult with a Behavioral Health Specialist or the Clinical Director (CD) of the CISM program and assess the need for referral for further care. They should assist the individual in arranging the referral resources.

Traumatic Stress Management Education & Support

The majority of traumatic stress reactions are normal reactions of normal, healthy people to abnormal events. They often resolve spontaneously with limited support from colleagues, and with rest, and the passage of time. Informal support from coworkers, supervisors, family, and friends can often help an individual regain his or her perspective and return to normal, adaptive function in a short period of time. In many of these cases, intervention of the CISM Team will not be required.

Trained Peer Support Personnel, using informal crisis intervention processes, can be very effective in assisting Department personnel in positively rebounding from a traumatic event. In many cases, no external Behavioral Health Specialists and no formal activation of the CISM Team are required.

In addition to individual support, which is the most frequently used crisis intervention tool, the Department CISM Team has been trained to apply many other supportive interventions and procedures.

The following list outlines the components of a comprehensive, integrated, systematic, and multi-tactic staff support program.

- Pre-Incident Education and Preparation
- Stress Assessment Techniques
- Strategic Crisis Intervention Planning
- Individual Support
- Large Group Crisis Intervention Services
- Small Group Crisis Intervention Services
- Family Support Services
- Pastoral Crisis Intervention Services
- Post Incident Staff Support and Education
- Follow-up and referral services

Confidentiality

A key to the success of the CISM initiative is the assurance of strict confidentiality. All members of this Team will adhere to absolute confidentiality and will sign a confidentiality agreement annually. Any statements or discussion with a CISM member, while fulfilling their respective CISM Team member role, will remain confidential except for the following exclusions:

- Threats of suicide or homicide
- Admissions of child or elder abuse
- Admissions to, or threats of, serious unlawful conduct
- When under the order of the Court

No mechanical recording or written notes will be made during any CISM intervention session. Only statistical information for the CISM intervention, its location, and/or recommendations will be completed by a Peer Support Coordinator following the session.

- All information shared by Department members during contacts with CISM Team members, either in individual conversations or within the context of group support discussions, is to be held in the strictest confidence. CISM Team members must be particularly careful regarding the identity of individuals and their personal descriptions of experiences and emotions. The CISM Team, however, must engage in clinical case reviews of their interventions with CISM Team Behavioral Health Specialists. These reviews, on occasion, may take place during Team meetings, which are closed to anyone other than current CISM Team members.

- Communication between CISM Team members and the individual is considered privileged by the Department. It is the policy of the Department not to question CISM Team members concerning any critical incident intervention or to inquire as to which individuals attended. The CISM Team has an obligation to provide advice and counsel to the supervisors and administrators of the Department. These discussions with command and administrative personnel should only be of a general nature. They should enhance the ability of command personnel to lead and assist their personnel. At all times, CISM Team members should protect both the identity of and the confidential information shared by individuals during individual or group support sessions unless specific permission was obtained from the person prior to a specific discussion of that individual.

- It is the policy of the "Team" that any CISM Team member who violates confidentiality will immediately be dismissed from the Howard County Department CISM Team, and may be subject to additional disciplinary action as appropriate under Department policy and county employee code(s) of conduct, or of the governing policies of Team members' affiliated organization.

Attendance and Location

While personnel are not required to attend CISM sessions, it is important to remember that each person may have something to add that may be helpful to a colleague in the restorative healing process. Research studies indicate that participation in a group support process after a unit has been exposed to a highly distressing and disruptive traumatic event enhances unit cohesion and performance. There is strong evidence that group support reduces symptoms of distress and restores personnel to normal performance. Furthermore, group support reduces the potential for future psychological disturbance in the individuals who participate.

- Attendance in the post incident CISM intervention processes is strongly encouraged (but not mandatory) for all personnel directly exposed to an incident.

- Only personnel involved in the incident and current CISM Team members are permitted to attend. All personnel and units in attendance at the intervention will be out of service during the session.

- Interventions are conducted anywhere there is ample space, privacy, and freedom from distractions. The site selection for the intervention will be mutually agreeable.

- All radios, cell phones, and pagers are to remain in the off position during the intervention.

Relieving Personnel From Duty

There are rare, extreme cases where exposures to traumatic events may result in a recommendation that individual(s) or companies are relieved from duty. The CISM personnel have no power to remove personnel from duty. They function in a support and advisory capacity only. They should provide appropriate information to the on-duty Battalion Chief or other high ranking officers, who are on the scene at the time. The officer(s) should decide on the necessity to temporarily remove personnel from duty. It should be explained to those removed from duty that the decision is not a punitive one, nor is it one that reflects negatively on them. Instead, the decision has been made in support of the personal wellness of the individual or for the benefit of a fatigued and stressed unit.

- Personnel who are removed from service should be placed on administrative leave for the duration of the workday. The individual(s) or their respective supervisors should fill out the appropriate First Report of Injury documentation in accordance with established General Orders.

- In most cases, a reduction in stimuli, crisis intervention from Peer Support Personnel, food, and rest are all that is necessary for personnel to recover sufficiently to return to their normal duties. In a few cases an individual may benefit from a contact with one of the CISM Team's Behavioral Health Specialists before returning to normal duties.

- The supervisor is to notify the on-duty Battalion Chief of personnel placed on leave following a critical incident. Additionally, the on-call CISM Peer Support Coordinator is to be notified any time that Department personnel are to be relieved from duty due to the negative impact from a critical incident. Whenever possible, prior to the release of any personnel, an initial assessment and the most appropriate intervention should be applied. It is important that the CISM Peer Support Personnel who made the first contact with a distressed individual provide for some form of follow-up. This may be accomplished by such means as a home visit or a phone call.

Composition of the CISM Team

The CISM Team will have approximately 25 members. A few members will be Behavioral Health Specialists. A few will be Chaplains and the bulk of the Team will be made up of Peer Support Personnel. Other members, with different professional training and skills, may be incorporated into the Team at the discretion of the CISM Program Administrator (PA) and the Clinical Director.

- The CISM Team membership will include the following:
  - CISM Program Administrator (PA)
  - Clinical Director (CD)
  - Senior Peer Support Coordinator (SPSC)
  - Peer Support Coordinators (PSC)
  - Peer Support Personnel (PSP)
  - Chaplains
  - Behavioral Health Specialists (BHS)

CISM Team members, who are members of the Department, will be considered "Peer Support Personnel." Peer Support Personnel will be trained in programs provided by the International Critical Incident Stress Foundation (ICISF).

- To be a Behavioral Health Specialist on the CISM Team, prospective members must possess a minimum of a Masters Degree in the fields of psychology, social work or a clinically oriented degree in behavioral health specialty from an accredited university. Behavioral Health Specialists will also be required to attend training provided by the International Critical Incident Stress Foundation (ICISF).

- CISM Team membership is a voluntary membership, with a minimum two year term, open to any HCDFRS member regardless of rank, seniority or assignment. Membership is attained via application, interview, and reference process. A CISM Team that is reflective of the whole Department is the overall goal in Team structure. The minimum training standard must be achieved before serving on the Team. The minimum training standard will be set by the CISM Program Administrator, Clinical Director, and the Senior Peer Support Coordinator (SPSC), and defined on the CISM Team Membership Application.

- Membership on the CISM Team is a privilege and not a right. Any conduct which runs counter to this program, serving its constituents, violating its governing policies, operational directives, or disclosure of any confidential or restricted/privileged information will result in immediate

dismissal from the Team, and possible other actions as appropriate under HCDFRS policy, county employee code(s) of conduct, or of the governing policies of Team members' affiliated organization.

- Any individual who is interested in becoming a member of the CISM should contact the CISM Program Administrator for more information. All applicants must submit a CISM Team Application and will undergo the interview process for membership with at least the CISM Program Administrator, Senior Peer Coordinator and the Clinical Director.

CISM Team Program Administrator Responsibilities

- In order for the CISM Initiative to be most effective in access and application, this program will be placed under the EMS Operations Section of the Department.

- The Deputy Chief of Emergency Medical Services (D/C-EMS), or other appointed individual, is to serve as the CISM Program Administrator.

- The CISM Program Administrator is responsible for the management and oversight of all activities of the CISM Team, including, but not limited to: recruitment and retention of Team members, training, continuing education, quality assurance, record keeping, referrals, Team deployment, and follow-up. The CISM Program Administrator will work closely with the Senior Peer Coordinator and the Clinical Director to determine the qualifications for membership and the operational needs of the Team.

- The CISM Program Administrator, or designee, will serve as the liaison with Behavior Health Specialists, EAP staff and therapists, and the designated occupational health center.

REFERENCES

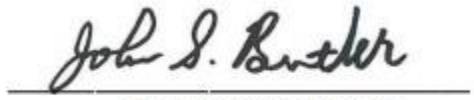
- NFPA 1500 (Fire Department Occupations Safety & Health Program), Chapter 12 (Critical Incident Stress Program), 2007 edition
- Everly GS, Mitchell, J.T. 2008. *Integrative Crisis Intervention.* Ellicott City, MD: Chevron Publishing Corporation.
- Mitchell, J.T. (2004). Characteristics of Successful Early Intervention Programs. *International Journal of Emergency Mental Health,* 6 (4), 175-184.
- Mitchell, J. T. (2007). Group Crisis Support: Why it works, When and How to provide it. Ellicott City, MD: Chevron Publishing.
- Mitchell, J.T. and Everly, G.S., Jr., (2001). Critical Incident Stress Debriefing: An operations manual for CISD, Defusing and other group crisis intervention services, Third Edition. Ellicott City, MD: Chevron.

SUMMARY OF DOCUMENT CHANGES

Converted to newest GO version 5/1/2013 by SG #8232.

FORMS/ATTACHMENTS

APPROVED



Deputy Chief John S. Butler
Operations Command

General Order 120.01: County Volunteer Firefighter EMS Program

Howard County Department of Fire and Rescue Services

GENERAL ORDER

GENERAL ORDER 120.01

County Volunteer Firefighter/EMS Program

EMERGENCY SERVICES BUREAU

Issue Date: 5/20/1995
Revision Date: 9/11/2014

APPLICABILITY

All Personnel

POLICY

The **County Volunteer Firefighter/EMS Program (CVFEP)** is designed to provide volunteer firefighting and Emergency Medical Service (EMS) support to the Howard County Department of Fire and Rescue Services (Department). This program will be discontinued after all current personnel have retired or are no longer able to perform as operational members.

DEFINTIONS

- The **Emergency Services Bureau** (ESB) is responsible for managing and coordinating the CVFEP. ESB will coordinate with the other Departmental Bureaus in providing guidance and resources in support of this program. ESB is responsible to coordinate and oversee the operational functions and schedules of the individuals.

- The **Education & Training Bureau** (E&T) is responsible to manage, maintain, certify and coordinate all training and training records associated with all personnel.

- The **Administrative Services Bureau** (ASB) is responsible for managing all human resource issues regarding the personnel assigned.

- Operational **County Volunteers** actively participate in firefighting and/or EMS duties. These individuals must successfully complete and maintain all required training, in order to be certified and authorized to perform the operational functions within their respective category.

PROCEDURES

All current County Volunteers will be evaluated and approved annually by the ESB no later than December 31st.

Training Requirements for County Volunteers:

All County Volunteers must complete and maintain the following training requirements by November 1, 2014, in order to continue in an operational status:

- Firefighter I (MFRI)
- Hazardous Materials Operations
- EMT-B or Paramedic
- Fit Testing – breathing apparatus face piece and HEPA mask
- Courage To Be Safe
- Infectious Control

All County Volunteers must complete and maintain the following additional training requirements or certifications by April 1, 2016, in order to continue in this program:

- Firefighter II (MFRI)
- Firefighter Survival & Rescue (MFRI)
- Rescue Tech – Vehicle Machinery Technical Rescuer (I & II)
- Emergency Vehicle Operations Course (MFRI)
- Rescue Tech – Confine Space Technical Rescuer (I & II - NBFSPQ)
- Weapons of Mass Destruction (MFRI)
- Swift Water Rescue Awareness (DFRS)
- Trench and Structural Collapse Awareness (DFRS)
- IS-100.b; IS-200.b; IS-700.a; IS-800.b (FEMA EMI) (Online courses)

Failure to complete and maintain these training requirements within the above listed time frames may result in the individual being removed from the County Volunteer Program.

Length of Service Award Program (LOSAP):

- County Volunteer personnel may be eligible for the LOSAP as provided in the Howard County Code.

General Guidelines:

- All County Volunteers must complete the Department's annual fit for duty physical, to include a stress test.
- All County Volunteers shall be assigned to a home station and must report to the station Officer-in-Charge (OIC) upon arrival and departure from a duty station.
- All personnel must be operationally qualified and cleared by the Assistant Chief of ESB before performing as an active County Volunteer responder.
- Sleep-ins are required to notify the station OIC prior to 1800 hours to secure a bunk.

Uniforms:

- All uniforms and Personal Protective Equipment (PPE) shall be issued to the member by the Department quartermaster pursuant to departmental policy. Each member is responsible for the routine care and maintenance of their uniforms and PPE.
- The member shall wear the appropriate uniform while on duty in the fire station. Uniforms shall not be worn for any non-related function outside the Department, without prior approval of the Chief of the Department.
- Mandatory, annual inspections of County Volunteer's PPE will be completed by December 31st, by the designated home station captain and forwarded to the Bureau of Occupational

Safety & Health (BOSH). County Volunteers are responsible for routine inspections and ensuring that their PPE is professionally cleaned each year by the Department's contract vendor.

- All uniform and PPE items shall be returned to the quartermaster by the member immediately upon his/her resignation or removal from the County Volunteer Firefighter/EMS Program.

REFERENCES

- Howard County Code. Title 17: Public Protection Services, § 17.102: *Fire and rescue tax.*
- Howard County Code. Title 17: Public Protection Services, § 17.103: *Payments to volunteer fire corporations.*

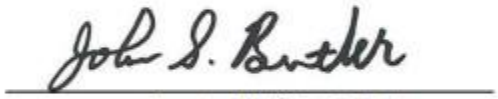
SUMMARY OF DOCUMENT CHANGES

Converted to newest GO version 7/2/2014.

FORMS/ATTACHMENTS

- None

APPROVED



Deputy Chief John S. Butler

Operations Command

General Order 120.02: Volunteer Officer Requirements

Howard County Department of Fire and Rescue Services

GENERAL ORDER

GENERAL ORDER 120.02

Volunteer Officer Requirements

OFFICE OF THE FIRE CHIEF

Issue Date: December 10, 1995
Revision Date: November 18, 2016

APPLICABILITY

All corporate volunteer uniformed personnel.

POLICY

The Howard County Department of Fire and Rescue Services (Department) shall establish and maintain a uniform, county-wide set of training requirements and minimum experience for all volunteer line officer personnel. The Department recognizes the authority of volunteer officer personnel, who have been approved by this program and duly elected or appointed by a volunteer corporation.

DEFINITIONS

Requirements are provided (Attachment A) for the following volunteer officer positions:

- Volunteer Fire Chief
- Volunteer Deputy Fire Chief
- Volunteer Assistant Fire Chief
- Volunteer Captain
- Volunteer Lieutenant
- Volunteer Sergeant
- Volunteer EMS Captain
- Volunteer EMS Lieutenant
- Volunteer EMS Sergeant

PROCEDURES

- All volunteer personnel must meet or exceed the requirements of a level before applying for that level of operational certification.
- The Volunteer Training Board shall receive, review, verify, and recommend all applications for volunteer officer authorization and forward to the Bureau of Education & Training.
- The Bureau of Education & Training shall receive all applications for volunteer officer authorization from the Volunteer Training Board and then review, verify, and make recommendations to the Fire Chief for final approval.
- Volunteer officers that have been authorized to be eligible to serve at a given rank prior

to January 01, 2017 shall be grandfathered for life to be eligible to serve at that authorized rank.

REFERENCES

- General Order 120.03: Operational Standards for Volunteer Personnel
- General Order 700.06: Volunteer Training Board

SUMMARY OF DOCUMENT CHANGES

- Added requirements for Volunteer EMS Lieutenant
- Revised requirements for all volunteer officer levels
- Updated the description of the approval process to include the Volunteer Training Board.

FORMS/ATTACHMENTS

- Attachment A – Volunteer Officer Requirements by Rank

APPROVED

John S. Butler, Fire Chief
Office of the Fire Chief

Attachment A

VOLUNTEER FIRE CHIEF

A Volunteer Fire Chief must meet the following training, certification and experience requirements. Requirements for this position must be maintained for continued operational status for this position.

REQUIRED LICENSES, REQUIREMENTS AND/OR REGISTRATIONS

Must meet one of the following:

A. Be at least thirty (30) years of age and;
   a. Have twelve (12) or more years of operational fire service experience after meeting Howard County minimum operational standards for a Volunteer Firefighter or equivalent, and;
   b. Served four (4) years in Howard County as an operational provider (can be inclusive of the above 12 years), and;
   c. Served one (1) year as a Volunteer Officer in Howard County (can be inclusive of the above 12 years).

B. Be at least thirty (30) years of age, meet the minimum requirements for Volunteer Deputy Chief or Volunteer Assistant Chief, and have satisfactorily served at the rank of Volunteer Deputy Chief or Volunteer Assistant Chief in Howard County for at least three (3) years.

Must meet all of the following:

1. Fire Officer 3 Certification.

2. Incident Safety Officer – Fire Suppression Certification.
   a. OR course completion of Fire Department Safety Officer (MFRI) prior to 01/01/2018.
   b. OR course completion of Fire Department Incident Safety Officer (MFRI) after 2016
   c. OR course completion of Incident Safety Officer (NFA) prior to 01/01/2018.

3. Vehicle Technical Rescuer I & II Certification.

4. Current Maryland certification as an EMT (2016 COMAR 30.01.01.02) or higher pre-hospital care provider.

5. Must meet the Minimum Operational Standard, including:
   a. Meet the approved Howard County Fire Service Medical and Physical Standards.
   b. If authorized as an emergency or non-emergency vehicle operator, must possess a valid Maryland Class C driver's license (or an appropriate class) issued by the State of Maryland.

** "Certification" implies MD state (MFSPQB) or national (NPQS, IFSAC, or DOD IFSAC) certification.*

WORKING CONDITIONS

- May be exposed to hazardous working conditions and inclement weather in performing his or her assignments.
- Duties include determining the course of action in an emergency.

VOLUNTEER DEPUTY CHIEF

A Volunteer Deputy Fire Chief must meet the following training, certification and experience requirements. Requirements for this position must be maintained for operational status for this position.

REQUIRED LICENSES, REQUIREMENTS AND/OR REGISTRATIONS

Must meet one of the following:

A. Be at least twenty-six (26) years of age and;
   a. Have ten (10) or more years of operational fire service experience after meeting Howard County minimum operational standards for a Volunteer Firefighter or equivalent, and;
   b. Served four (4) years in Howard County as an operational provider (can be inclusive of the above 10 years), and;
   c. Served one (1) year as a Volunteer Officer in Howard County (can be inclusive of the above 10 years).

B. Be at least twenty-six (26) years of age, meet the minimum requirements for Volunteer Assistant Chief, and shall have satisfactorily served at the rank of Volunteer Assistant Chief in Howard County for at least one (1) year.

Must meet all of the following:

1. Fire Officer 3 Certification.

2. Incident Safety Officer – Fire Suppression Certification.
   a. OR course completion of Fire Department Safety Officer (MFRI) prior to 01/01/2018.
   b. OR course completion of Incident Safety Officer (NFA) prior to 01/01/2018.

3. Vehicle Technical Rescuer I & II Certification.

4. Current Maryland certification as an EMT (2016 COMAR 30.01.01.02) or higher pre-hospital care provider.

5. Must meet the Minimum Operational Standard, including:
   a. Meet the approved Howard County Fire Service Medical and Physical Standards.
   b. If authorized as an emergency or non-emergency vehicle operator, must possess a valid Maryland Class C driver's license (or an appropriate class) issued by the State of Maryland.

** "Certification" implies MD state (MFSPQB) or national (NPQS, IFSAC, or DOD IFSAC) certification.*

WORKING CONDITIONS

- May be exposed to hazardous working conditions and inclement weather in performing his or her assignments.
- Duties include determining the course of action in an emergency.

VOLUNTEER ASSISTANT CHIEF

A Volunteer Assistant Fire Chief must meet the following training, certification and experience requirements. Requirements for this position must be maintained for continued operational status for this position.

REQUIRED LICENSES, REQUIREMENTS AND/OR REGISTRATIONS

Must meet one of the following:

A. Be at least twenty-four (24) years of age and;
   a. Have eight (8) or more years of operational fire service experience after meeting Howard County minimum operational standards for a Volunteer Firefighter or equivalent, and;
   b. Served four (4) years in Howard County as an operational provider (can be inclusive of the above eight years), and;
   c. Served one (1) year as a Volunteer Officer in Howard County (can be inclusive of the above eight years).

B. Be at least twenty-four (24) years of age, meet the minimum requirements for Volunteer Fire Captain, and shall have satisfactorily served at the rank of Volunteer Fire Captain in Howard County for at least one (1) year.

Must meet all of the following:

1. Fire Officer 3 Certification.

2. Incident Safety Officer – Fire Suppression Certification.
   a. OR course completion of Fire Department Safety Officer (MFRI) prior to 01/01/2018.
   b. OR course completion of Incident Safety Officer (NFA) prior to 01/01/2018.

3. Vehicle Technical Rescuer I & II Certification.

4. Current Maryland certification as an EMT (2016 COMAR 30.01.01.02) or higher pre-hospital care provider.

5. Must meet the Minimum Operational Standard, including:
   a. Meet the approved Howard County Fire Service Medical and Physical Standards.
   b. If authorized as an emergency or non-emergency vehicle operator, must possess a valid Maryland Class C driver's license (or an appropriate class) issued by the State of Maryland.

** "Certification" implies MD state (MFSPQB) or national (NPQS, IFSAC, or DOD IFSAC) certification.*

WORKING CONDITIONS

- May be exposed to hazardous working conditions and inclement weather in performing his or her assignments.
- Duties include determining the course of action in an emergency.

VOLUNTEER FIRE CAPTAIN

A Volunteer Captain must meet the following training, certification and experience requirements. Requirements for this position must be maintained for operational status for this position.

REQUIRED LICENSES, REQUIREMENTS AND/OR REGISTRATIONS

Must meet one of the following:

A. Be at least twenty-one (21) years of age and;
   a. Have five (5) or more years of operational fire service experience after meeting Howard County minimum operational standards for a Volunteer Firefighter or equivalent, and;
   b. Served two (2) years in Howard County as an operational provider (can be inclusive of the above five years).

B. Be at least twenty-one (21) years of age and meet the minimum requirements for Volunteer Fire Lieutenant and shall have satisfactorily served at the rank of Volunteer Fire Lieutenant in Howard County for at least two (2) years.

Must meet all of the following:

1. Fire Officer 2 Certification.

2. Incident Safety Officer – Fire Suppression Certification.
   a. OR course completion of Fire Department Safety Officer (MFRI) prior to 01/01/2018.
   b. OR course completion of Incident Safety Officer (NFA) prior to 01/01/2018.

3. Vehicle Technical Rescuer I & II Certification.

4. Current Maryland certification as an EMT (2016 COMAR 30.01.01.02) or higher pre-hospital care provider.

5. Must meet the Minimum Operational Standard, including:
   a. Meet the approved Howard County Fire Service Medical and Physical Standards.
   b. If authorized as an emergency or non-emergency vehicle operator, must possess a valid Maryland Class C driver's license (or an appropriate class) issued by the State of Maryland.

** "Certification" implies MD state (MFSPQB) or national (NPQS, IFSAC, or DOD IFSAC) certification.*

WORKING CONDITIONS

- May be exposed to hazardous working conditions and inclement weather in performing his or her assignments.
- Duties include determining the course of action in an emergency.

VOLUNTEER FIRE LIEUTENANT

A Volunteer Lieutenant must meet the following training, certification and experience requirements. Requirements for this position must be maintained for operational status for this position.

REQUIRED LICENSES, REQUIREMENTS AND/OR REGISTRATIONS

1. Be at least twenty-one (21) years of age and;
    a. Have three (3) or more years of operational fire service experience after meeting Howard County minimum operational standards for a Volunteer Firefighter or equivalent, and;
    b. Served one (1) year in Howard County as an operational provider (can be inclusive of the above three years).

2. Fire Officer 1 Certification.

3. Incident Safety Officer – Fire Suppression Certification.
    a. OR course completion of Fire Department Safety Officer (MFRI) prior to 01/01/2018.
    b. OR course completion of Incident Safety Officer (NFA) prior to 01/01/2018.

4. Vehicle Technical Rescuer I & II Certification.

5. Current Maryland certification as an EMT (2016 COMAR 30.01.01.02) or higher pre-hospital care provider.

6. Must meet the Minimum Operational Standard, including:
    a. Meet the approved Howard County Fire Service Medical and Physical Standards.
    b. If authorized as an emergency or non-emergency vehicle operator, must possess a valid Maryland Class C driver's license (or an appropriate class) issued by the State of Maryland.

** "Certification" implies MD state (MFSPQB) or national (NPQS, IFSAC, or DOD IFSAC) certification.*

WORKING CONDITIONS

- May be exposed to hazardous working conditions and inclement weather in performing his or her assignments.
- Duties include determining the course of action in an emergency.

VOLUNTEER SERGEANT

A Volunteer Sergeant must meet the following training, certification and experience requirements. Requirements for this position must be maintained for operational status for this position.

REQUIRED LICENSES, REQUIREMENTS AND/OR REGISTRATIONS

1. Be at least eighteen (18) years of age and;
    a. Have two (2) or more years of operational fire service experience after meeting Howard County minimum operational standards for a Volunteer Firefighter or equivalent, and;
    b. Served one (1) year in Howard County as an operational provider (can be inclusive of the above two years).

2. Firefighter 2 Certification.

3. Must meet the Minimum Operational Standard, including:
    a. Meet the approved Howard County Fire Service Medical and Physical Standards.
    b. If authorized as an emergency or non-emergency vehicle operator, must possess a valid Maryland Class C driver's license (or an appropriate class) issued by the State of Maryland.
    c. Current Maryland certification as an EMR (2016 COMAR 30.01.01.02) or higher pre-hospital care provider.

** "Certification" implies MD state (MFSPQB) or national (NPQS, IFSAC, or DOD IFSAC) certification.*

WORKING CONDITIONS

- May be exposed to hazardous working conditions and inclement weather in performing his or her assignments.

VOLUNTEER EMS CAPTAIN

A Volunteer EMS Captain must meet the following training, certification and experience requirements.

REQUIRED LICENSES, REQUIREMENTS AND/OR REGISTRATIONS

1. Be at least twenty-three (23) years of age and;
    a. Have five (5) or more years of experience as a pre-hospital ALS provider, and;
    b. Served two (2) years in Howard County as an operational ALS provider (can be inclusive of the above five years).

2. Current Maryland certification as pre-hospital ALS provider.

3. Must meet the Minimum Operational Standard, including:
    a. Meet the approved Howard County Fire Service Medical and Physical Standards.
    b. If authorized as an emergency or non-emergency vehicle operator, must possess a valid Maryland Class C driver's license (or an appropriate class) issued by the State of Maryland.

WORKING CONDITIONS

- May be exposed to hazardous working conditions and inclement weather in performing his or her assignments.

VOLUNTEER EMS LIEUTENANT

A Volunteer EMS Lieutenant must meet the following training, certification and experience requirements.

REQUIRED LICENSES, REQUIREMENTS AND/OR REGISTRATIONS

1. Be at least twenty-one (21) years of age and;
    a. Have three (3) or more years of experience as a pre-hospital ALS or BLS provider, and;
    b. Served one (1) year in Howard County as an operational BLS or ALS provider (can be inclusive of the above three years).

2. Current Maryland certification as an EMT (2016 COMAR 30.01.01.02) or higher pre-hospital care provider.

3. Must meet the Minimum Operational Standard, including:
    a. Meet the approved Howard County Fire Service Medical and Physical Standards.
    b. If authorized as an emergency or non-emergency vehicle operator, must possess a valid Maryland Class C driver's license (or an appropriate class) issued by the State of Maryland.

WORKING CONDITIONS

- May be exposed to hazardous working conditions and inclement weather in performing his or her assignments.

VOLUNTEER EMS SERGEANT

A Volunteer EMS Sergeant must meet the following training, certification and experience requirements.

REQUIRED LICENSES, REQUIREMENTS AND/OR REGISTRATIONS

1. Be at least nineteen (19) years of age and;
    a. Served two (2) years in Howard County as an operational BLS or ALS provider.

2. Current Maryland certification as an EMT (2016 COMAR 30.01.01.02) or higher pre-hospital care provider.

3. Must meet the Minimum Operational Standard, including:
    a. Meet the approved Howard County Fire Service Medical and Physical Standards.
    b. If authorized as an emergency or non-emergency vehicle operator, must possess a valid Maryland Class C driver's license (or an appropriate class) issued by the State of Maryland.

WORKING CONDITIONS

- May be exposed to hazardous working conditions and inclement weather in performing his or her assignments.

General Order 120.03: Operational Standards for Volunteer Personnel

DEPARTMENT OF FIRE AND RESCUE SERVICES

	GENERAL ORDER 120.03	

Originating From	Issue Date	Revision Date	Attachments
Administration	09/03/1997	N/A	N/A

SUBJECT: Operational Standards for Volunteer Personnel
APPLICABILITY: All Personnel

POLICY:
The Howard County Volunteer Firemen's Association and DFRS recognize the need for minimum operational standards for volunteer members in order to provide a safe, quality, uniform level of service. All personnel participating operationally as fire, rescue, and/or emergency medical service providers shall meet the following minimum standards.

1 DEFINITIONS:

1.1 Category of Operational Participation Category that designates the approved level of operational participation. (i.e. full performance, EMS provider only, fire/rescue provider only, fire/rescue/first responder provider only)

1.2 Minimum Standard The minimum amount of training that must be successfully completed within a specific category of operational participation.

1.3 Course Titles: Where course titles are specified, acceptable equivalencies will be considered.

2 GENERAL

2.1 The respective Volunteer Fire Chief shall be responsible for the authorization of their members to become operationally active.

2.2 Operational participation for all members shall be managed in accordance with this Policy.

2.3 All operational personnel shall be covered by Workers Compensation.

2.4 Before being authorized to ride, all personnel will be required to have successfully completed Hazmat Awareness, Blood borne Pathogens, and CPR training.

2.5 Must be 16 years of age or older.

2.6 Personnel currently enrolled in Firefighter I or EMT-B Programs may be granted limited permission to ride provided successful completion of mid-term exam and they have met the requirements of 2.4.

3 FULL PERFORMANCE OPERATIONAL STATUS MINIMUM STANDARDS

3.1 Successful completion of the MFRI Firefighter I Program

3.2 Possess current certification of the Maryland EMT-B Program

3.3 Meets all requirements of AEmergency Medical Service Providers®

3.4 Possess current AED certification

4 FIRE/RESCUE FIRST RESPONDERS OPERATIONAL STATUS MINIMUM STANDARDS

4.1 Successful completion of the MFRI Firefighter I Program

4.2 Possess current First Responder certification

5 EMS SERVICE PROVIDERS OPERATIONAL STATUS MINIMUM STANDARD

5.1 Possess current certification as EMT-B, EMT-I or EMT-P

5.2 Possess current Thumper certification

5.3 Possess current AED certification

6 FIREFIGHTER OPERATIONAL STATUS MINIMUM STANDARDS

6.1 Successful completion of the MFRI Firefighter I Program

6.2 Must meet all requirements of 2.0 General Section

6.3 Personnel entering Fire Service after July 1, 1997 shall be required to complete the First Responders Program or EMT-B within 2 years from the time they begin their first training class.

6.4 Personnel operationally active prior to June 30, 1997 will be required to successfully complete the First Responder Program or EMT-B by June 30, 2000 in order to be operationally active.

Approved:

Joseph A. Herr
Fire Chief

Endorsed by:

Chief Donald E. Watson, Elkridge Volunteer Department, Inc.
Chief John J. Klein, Ellicott City Volunteer Firemen's Associatipn, Inc.
Chief H. Mithcell Day, West Friendship Volunteer Firemen's Association, Inc.
Chief J. Lee Sirk, Lisbon Volunteer Fire Company, Inc.
Chief F. Patric Marlatt, Fifth District Volunteer Fire Department, Inc.
Chief Norman Wines, Savage Volunteer Fire Company, Inc.

General Order 150.02: DFRS Extreme Weather Advi sories

Howard County Department of Fire and Rescue Services

GENERAL ORDER

GENERAL ORDER 150.02

DFRS Extreme Weather Advisories

BUREAU OF OCCUPATIONAL SAFETY AND HEALTH

Issue Date: June 10, 1995
Revision Date: December 23, 2015

APPLICABILITY

All Personnel

POLICY

The Howard County Department of Fire and Rescue Services (Department) recognizes the adverse effects weather extremes may have on operational personnel during emergency incidents and other Department activities.

To reduce the incidence of weather related stress, the Department has created a policy that modifies activities during times of extreme heat or cold. Adjustments shall be made for both nonessential and emergency activities when conditions are severe.

DEFINITIONS

- A **Red-Flag Extreme Weather Advisory** is an advisory issued by Department field command officers that communicates that extreme weather conditions exist, either due to cold or heat. Extreme caution is required for outdoor activities, and non-emergency outdoor activities are restricted as outlined in this policy.

- A **Yellow-Flag Extreme Weather Advisory** is an advisory issued by Department field command officers that communicates that weather conditions are approaching extreme levels, either due to cold or heat. Caution is required for outdoor activities, and modifications shall be made in accordance with this policy.

PROCEDURES

EXTREME HOT WEATHER:

During periods of high heat, the **heat index** (Attachment A) will be used to determine the need to issue an extreme weather advisory.

- When the heat index is between 86 and 95 degrees, a **Yellow-Flag Extreme Weather Advisory** shall be issued.
- When the heat index is 96 degrees or greater, a **Red-Flag Extreme Weather Advisory** shall be issued.

Extreme Cold Weather:

During periods of severe cold, the **wind chill index and ambient temperature** (Attachment B) will be used to determine the need to issue an extreme weather advisory.

- When the ambient or wind chill temperature is between 11 and 25 degrees, a **Yellow-Flag Extreme Weather Advisory** shall be issued.
- When the ambient or wind chill temperature is 10 degrees or below, a **Red-Flag Extreme Weather advisory** shall be issued.

Responsibilities:

All Operational Personnel:

- Taking the necessary preventive steps to be prepared for and reduce the chance of heat/cold related injuries.
- Taking preparatory measures to assure they have immediate access (on the unit to which they are assigned) to a change of clothes, layered cold protection, and appropriate cold-winter clothing/gear should outside operations become necessary. All personnel shall take personal responsibility to be prepared and have appropriate resources with them.
- Advising their crew and immediate supervisor any time they believe that their level of fatigue or exposure may have adverse effects on them, their crew, or the operation.
    - It is equally each person's responsibility to be aware of and report such conditions if noticed in other members of their crew.

Career and Volunteer Officers and Supervisors:

- Operating in accordance with the applicable Work/Rest Cycle Guidance as defined by this policy, and in accordance with the Weather Extreme Advisory "Flag" as declared for a given time period by Field Battalion Chiefs.
- Maintaining an awareness of the condition of all personnel operating within their span of control and ensuring that adequate measures are taken to provide for their safety and health.
- Monitor weather conditions from the National Weather Service (NWS) at BWI Airport or some other more specific official government source pertinent to an incident location, or through the Howard County Public Safety Answering Point emergency dispatchers (Howard Communications) if necessary. It may be necessary for officers and Command to monitor weather conditions continuously in order to stay informed of changing conditions.

Field Battalion Chiefs and Shift Safety Officers:

- Continuously monitor the current Heat/Wind Chill index values throughout the shift.
- The Field Battalion Chief shall authorize the Shift Safety Officer to announce the issue or change of a Department weather extreme advisory via all of the following:
    - A Special Information Broadcast over the radio system (0700-2300 hours)
    - A CAD message via Howard Communications
    - An email to all "Fire All Personnel"
    - Additional announcements throughout this time period will also be made whenever the current Heat/Wind Chill index values change and necessitate a modification to the weather extreme advisory.

The Formal Rehabilitation Function:

As a baseline, formal incident rehabilitation shall be established upon confirmation of a working incident where Department personnel will be engaged in outdoor activity for more than one hour (rescue, fire, hazmat, etc.). When formal incident rehabilitation is instituted:

- A Rehab Division/Group and Rehab Supervisor shall be assigned.
- Units (crews) shall be assigned IN and OUT of the Rehab Division on a regular basis during exposure to outdoor activities.
- A Rehab Division staging area(s) for personnel shall be set up in a sheltered or climate controlled area(s). Crews shall be rotated and rehabilitated, and should include the opportunity for rest, medical assessment, monitoring of vital signs and rehydration with hot/cold beverages. In cold weather, personnel with wet clothing should change into dry clothing, if possible, before returning outside.
- When conditions exist that require the Formal Rehabilitation Function, Incident Commanders may alter running assignments based on available information and weather conditions.

Preventive Measures:

Fluid Replacement:

A cooler of fresh drinking water shall be carried on all station apparatus, excluding utility vehicles.

- Hot Weather:
  - A critical factor in the prevention of heat injury is the maintenance of water and electrolytes.
  - Recommended amounts of water should be consumed before, during and after becoming involved in any work activities (amounts vary in relation to temperature and activity level).
  - A general rule of thumb during times of activity and heat stress is that operational personnel should consume at least (1) quart of water per hour, or one cup of water every 15-20 minutes. Water is still the choice of oral fluid replacement; however, a commercially prepared activity beverage served chilled or cooled is acceptable (mixed with 50 % water).

- Cold Weather:
  - Operational personnel still need to maintain an appropriate level of hydration in cold environments, especially when moderate to heavy work is being done.
  - Hot drinks are not necessary but may be desirable in cold environments.

Work/Rest Cycle Guidance:

Work/Rest Cycle Guidance has been developed to assist emergency personnel and supervisors who may become engaged in non-essential, non-emergency outside activities during times of environmental climatic extremes. The guidance provides information that can be used as part of a mitigation strategy to control the potential adverse effects of these conditions and to provide safe guidelines for personnel working in the described temperatures.

This guidance is calibrated to apply to activities that are conducted while wearing the Class "C" uniform, and will likely need to be adjusted if other levels of PPE are required, such as turnout gear or encapsulating PPE. This guidance is modified for our application, but is based upon the threshold limit values for thermal stress developed by the American Conference of Governmental Industrial Hygienists, who depict four operational levels, temperatures, and the corresponding work/rest cycle that is recommended.

DFRS Advisory	Heat/Wind Chill Index	Work/Rest Cycle Guidance
Red Flag (Cold)	10° F and below	20 +/- 5 min / 10 min
Yellow Flag (Cold)	11° F to 25° F	30 +/- 5 min / 10 min
Non-extreme	26° F to 85° F	45 +/- 5 min / 15 min
Yellow Flag (Heat)	86° F to 95° F	30 +/- 5 min / 30 min
Red Flag (Heat)	96° F and above	20 +/- 5 min / 30 min

Regardless of the Work/Rest Cycle Guidance, it is imperative that individuals know their limits. The effects of heat stress, particularly on the un-acclimatized worker, can be severe. An objective evaluation of an individual's fatigue shall be made frequently by oneself as well as other members of their crew. ***An individual's fatigue level will always supersede any work/rest guidance, and earlier and extended rest periods and rehabilitation shall be initiated whenever necessary.***

Protective Equipment:

Regardless of Heat/Wind Chill Index value, all necessary protective equipment will be donned and employed in accordance with all regulations at all times (e.g. safety glasses/goggles, work gloves, etc.)

Operational Guidelines for Department Extreme Weather Advisories:

Red-Flag (Hot or Cold): Operations during Moderate to Severe Hot/Cold Conditions

(Wind Chill Index 10 degrees F and below or heat index 96 degrees F and above)

- *Extreme Caution* should be exercised for all outside activities.
- Non-essential outside activities shall be suspended and only limited activities that are essential to maintenance, preparation, and operations of the Department shall be undertaken.
    - Routine duties (training, PT, maintenance, etc.) shall be confined to areas with appropriate climate controls.
    - Permitted activities include: snow removal, hydrant/draft tank dig out, snow chains, apparatus fueling, limited building/apparatus maintenance, as well as in-service inspections/fire hazard surveys.

- Necessary precautions to protect personnel shall be taken by emergency personnel, supervisors, and incident commanders when operating during emergency incidents and in outside environments.
    - Formal incident rehabilitation shall be established if operational work cycles exceed 10 minutes.
    - Work/Rest Cycle guidance for activities performed under this advisory is a 20 +/- 5 minute work period to a 10 minute rest period. This rest period should allow for aerobic recovery, rehydration, and temperature normalization.
    - Cool, shaded, sheltered areas out of the elements should be used for rest areas in times of heat. Warm, heated, sheltered areas out of the elements should be used for rest areas in times of cold.
    - Access to hydration and drying should be facilitated in both cases.
    - Access to personal preparation materials should be facilitated.

- Daily uniforms shall be adjusted to provide protection or relief from weather conditions, but shall remain in compliance with Department issued/approved apparel.
    - Personnel operating outside should wear their class "C" uniform with optional clothing items appropriate for the level of cold or heat and physical activity that will be undertaken (e.g. for cold; long underwear, caps, gloves, insulated jackets, coveralls, insulated boots, etc.).

Yellow-Flag (Hot or Cold): Operations during Relative Hot/Cold Conditions

(Wind Chill Index 11 degrees F to 25 degrees F or Heat Index 86 degrees F to 95 degrees F)

- *Caution* should be exercised for all outside activities.
- Non-essential outdoor activities shall be kept to a minimum, limited in duration, and should be limited to those classified with a light to moderate workload.
    - All outside activities are permitted.
    - Formal incident rehabilitation shall be established if operational work cycles exceed 15 minutes.
    - Outdoor training is permitted, but supervisors and training event commanders shall institute appropriate strategies to mitigate increased risk of exposure injury, which shall include a formal incident rehabilitation process during training exercises. Adjustment of the training event may be necessary.
    - Emergency personnel are encouraged to work in climate-controlled areas when possible.
    - Outdoor physical training during this time should be limited in nature.

- Necessary precautions to protect personnel shall be taken by emergency personnel, supervisors, and Incident Commanders when operating during emergency incidents and in outside environments.
    - Work/Rest Cycle guidance for activities performed under this advisory is a 30 +/- 5 minute work period to a 10 minute rest period. This rest period should also allow for re-warming (heated area or shelter to break the wind) and a change of clothing if needed.
    - Operational Personnel should ensure a satisfactory level of hydration before and during all activities.

- Daily uniforms may be adjusted at the discretion of the Field Battalion Chief or Incident Commander in order to provide protection or relief from weather conditions, but shall remain in compliance with Department issued/approved apparel.
    - Personnel operating during this time should wear their class "C" uniform with optional approved clothing items appropriate for the level of cold and physical activity that will be undertaken.

Non-Extreme Weather Conditions: Operations during Normal to Mild Heat and Cold Conditions

(Wind Chill/Heat Index values of 26 degrees F to 85 degrees F)

- All personnel, especially officers and supervisors, should be aware that prolonged exposure, even to non-extreme weather conditions, can result in injury, especially when personnel are wet. Care must be taken, both at an individual and supervisory level, to be accountable for adequate and appropriate preparation for operating in whatever outside conditions might occur.
- No prescribed limitations for activities.
- All outside activities are permitted.
- Work/Rest Cycle guidance for activities performed under this advisory is a 45 +/- 5 minute work periods to a 15 minute rest period each hour. The rest period should be taken in well-ventilated shaded areas and include fluids for re-hydration.
- Daily uniforms and clothing for personnel operating during this time should be their class "C" uniform with optional approved clothing items appropriate for the physical activity that will be undertaken.

REFERENCES

- National Fire Protection Agency 1500: Standard on Fire Department Occupational Safety and Health Programs (2013).
- American Conference of Governmental Industrial Hygienists (ACGIH): Documentation of the Threshold Limit Values and Biological Exposure Indices (1996).
- National Institute for Occupational Safety and Health: Criteria for a Recommended Standard-Occupational Exposure to Hot Environments (1986).
- U.S. Fire Administration: Emergency Incident Rehabilitation (February 2008), available at: https://www.usfa.fema.gov/downloads/pdf/publications/fa_314.pdf.

SUMMARY OF DOCUMENT CHANGES

Established red and yellow flag alerts for cold emergencies
Adjusted the title
Added Non-Essential, Non-Emergency Work/Rest Cycles.
Established NWS as the official temperature source, and BWI as the default location

FORMS/ATTACHMENTS

- Attachment A: Heat Stress Index and Injury Threat Chart
- Attachment B: Wind Chill Chart with Frostbite Injury Times

APPROVED

John S. Butler, Fire Chief
Office of the Fire Chief

Author:

Joann Rund, Assistant Chief
Bureau of Occupational Safety and Health

Attachment A

Heat Stress Index and Injury Threat Chart

NOAA's National Weather Service

Heat Index

Temperature (°F)

Relative Humidity (%)	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
55	81	84	86	89	93	97	101	106	112	117	124	130	137			
60	82	84	88	91	95	100	105	110	116	123	129	137				
65	82	85	89	93	98	103	108	114	121	128	136					
70	83	86	90	95	100	105	112	119	126	134						
75	84	88	92	97	103	109	116	124	132							
80	84	89	94	100	106	113	121	129								
85	85	90	96	102	110	117	126	135								
90	86	91	98	105	113	122	131									
95	86	93	100	108	117	127										
100	87	95	103	112	121	132										

Likelihood of Heat Disorders with Prolonged Exposure or Strenuous Activity

Caution | Extreme Caution | Danger | Extreme Danger

Attachment B

Wind Chill Chart with Frostbite Injury Times

Wind Chill Chart

Wind (mph) \ Temperature (°F)	40	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
5	36	31	25	19	13	7	1	-5	-11	-16	-22	-28	-34	-40	-46	-52	-57	-63
10	34	27	21	15	9	3	-4	-10	-16	-22	-28	-35	-41	-47	-53	-59	-66	-72
15	32	25	19	13	6	0	-7	-13	-19	-26	-32	-39	-45	-51	-58	-64	-71	-77
20	30	24	17	11	4	-2	-9	-15	-22	-29	-35	-42	-48	-55	-61	-68	-74	-81
25	29	23	16	9	3	-4	-11	-17	-24	-31	-37	-44	-51	-58	-64	-71	-78	-84
30	28	22	15	8	1	-5	-12	-19	-26	-33	-39	-46	-53	-60	-67	-73	-80	-87
35	28	21	14	7	0	-7	-14	-21	-27	-34	-41	-48	-55	-62	-69	-76	-82	-89
40	27	20	13	6	-1	-8	-15	-22	-29	-36	-43	-50	-57	-64	-71	-78	-84	-91
45	26	29	12	5	-2	-9	-16	-23	-30	-37	-44	-51	-58	-65	-72	-79	-86	-93
50	26	19	12	4	-3	-10	-17	-24	-31	-38	-45	-52	-60	-67	-74	-81	-88	-95
55	25	18	11	4	-3	-11	-18	-25	-32	-39	-46	-54	-61	-68	-75	-82	-89	-97
60	25	17	10	3	-4	-11	-19	-26	-33	-40	-48	-55	-62	-69	-76	-84	-91	-98

Frostbite Times: 30 minutes | 10 minutes | 5 minutes

$$\text{Wind Chill (°F)} = 35.74 + 0.6215T - 35.75(V^{0.16}) + 0.4275T(V^{0.16})$$

Where, T= Air Temperature (°F) V= Wind Speed (mph)

Effective 11/01/01

General Order 150.05: Safety Committee

DEPARTMENT OF FIRE AND RESCUE SERVICES

GENERAL ORDER

150.05

Originating From	Issue Date	Revision Date	Attachments
Administration	**10/18/1994**	**N/A**	**N/A**

SUBJECT: Safety Committee
APPLICABILITY: All Personnel

POLICY:
To conduct research, study and review matters pertaining to safety and occupational health within the Howard County Department of Fire and Rescue Services (DFRS) and make recommendations accordingly.

1 GENERAL

1.1 The Safety Committee shall serve as an advisory committee to the Fire Chief.

1.2 The Safety Committee is authorized to establish its own rules of procedure and schedule of meetings.

1.3 Regular meetings shall be scheduled on a bi-monthly basis and special meetings may be called on an "as needed" basis. The committee will determine the date, time, and location of each meeting based upon the needs of the committee members.

1.4 Written minutes of each meeting shall be retained and shall be made available to all members of the department. A copy of the minutes will be provided to the Chief Deputies and the Fire Chief.

2 COMPOSITION

2.1 The Safety Committee shall be composed of a maximum of ten (10) personnel, excluding the chairperson.

2.1.1 Membership shall be derived from representatives of the following:

2.1.1.1 Bureau of Operations (Fire and EMS)
2.1.1.2 Bureau of Services (Training)
2.1.1.3 Bureau of Fire Prevention
2.1.1.4 Howard County Fire Officer's Association
2.1.1.5 Local 2000
2.1.1.6 Howard County Volunteer Firemen's Association
2.1.1.7 Volunteer Operations

2.1.1.8 Phoenix Sentinels
2.1.1.9 At-large

2.2 The chairperson shall be selected by the Fire Chief.

3 DUTIES AND RESPONSIBILITIES

3.1 The Safety Committee will issue a report on an annual basis of its findings and recommendations. The report will be due at the end of each calendar year and should include pertinent data such as injury and lost time statistics based on availability.

3.2 Any new (other than standard inventory) device which is proposed to be purchased, and/or placed on any apparatus, shall first be reviewed by the safety committee.

Approved:

Joseph A. Herr
Fire Chief

General Order 150.09: Respiratory Protection

DEPARTMENT OF FIRE AND RESCUE SERVICES

GENERAL ORDER

150.09

Originating From	Issue Date	Revision Date	Attachments
Administration	**08/04/2000**	**N/A**	**A-E**

SUBJECT: **Respiratory Protection**
APPLICABILITY: **All Personnel**

POLICY:
It is the policy of Howard County Department of Fire and Rescue Services (DFRS) to ensure that all fire and rescue personnel use safe and efficient procedures on all emergency incidents. To ensure their safety, the DFRS will provide properly fitted, tested, and maintained respiratory protective equipment for all fire and rescue personnel. Personnel must be trained in and consistently use these devices in all areas where an IDLH atmosphere may exist. Personnel will be provided with SCBA and/or SAR, as appropriate, which meet the requirements of NIOSH, MSHA, and NFPA applicable standards at the time of purchase.

1 GENERAL

1.1 This policy shall be in compliance with 29 CFR 1910.134, Respiratory Protection Standard, issued by the United States Department of Labor, Occupational Safety and Health Administration (OSHA).

1.1.1 Maryland Occupational Safety and Health (MOSH) has determined that where career and volunteer firefighter/rescuers are deployed together, *all* firefighter/rescuer personnel (both career and volunteer firefighters) must comply with these requirements. DFRS is adopting this policy to ensure the health and safety of all its personnel with firefighter/rescuer operational status.

1.2 For more information regarding this policy, please contact the Howard County Fire and Rescue Occupational Health and Safety Officer.

2 DEFINITIONS

2.1 **ANSI Z88.6 - 1984** is an American National Standards Institute, Inc. standard for respiratory protection - respirator use - physical qualifications for personnel.

2.2 **Compressed breathing air** is defined as air with a minimum air quality of Grade E, as well as a water vapor level of less than 24 ppm as specified by NFPA 1500, Compressed Gas Association, G-7.1, 1992 Edition, commodity specification for air.

2.3 The **facepiece** is a component of the respirator which covers the wearer's nose, mouth, and in some cases the eyes. It includes the headbands, exhalation valves and in some cases components that are required to connect it to a respirable air supply.

2.4 The **Fire Chief** is the uniformed head of Howard County Department of Fire and Rescue Services, who has all powers of a department director, administers all fire and rescue services provided in the county and implements the policies of Howard County Fire and Rescue.

2.5 **Howard County Department of Fire and Rescue Services (DFRS)** is a combination system of career and volunteer personnel providing fire, rescue and emergency medical services to the citizens of Howard County Maryland.

2.6 An **Immediately Dangerous to Life or Health** atmosphere poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to escape from a dangerous atmosphere.

2.7 The **Mine Safety Health Administration (MSHA)** is a federal agency that regulates the mining industry in the safety and health arena.

2.8 The **National Fire Protection Administration (NFPA)** is an organization of firefighters, insurance carriers and other interested parties who establish and publish the National Fire Standards, National Electrical Code and related materials.

2.9 The **National Institute for Occupational Safety and Health (NISOH)** is a federal agency that conducts research on health and safety concerns as well as tests and certifies respirators.

2.10 A **Pass Device** is a acronym for the personal Alert Safety system unit attached to the turnout gear or built in the self-contained breathing apparatus.

2.11 A **Qualitative Fit Test (QLFT)** is a facepiece testing process used to determine the proper size facepiece for individual personnel by **determining a person's response to the irritating chemicals released in the "smoke" produced by a stannic chloride ventilation smoke tube to detect leakage into the respirator.**

2.12 A **Quantitative Fit Test (QNFT)** is a facepiece testing process used to determine the proper size facepiece for individual personnel by numerically measuring the amount of leakage into the facepiece.

2.13 A **Respiratory Protective Equipment (RPE)** is a device designed to protect the wearer from inhaling harmful atmospheres.

2.14 A **Supplied Air Respirator (SAR)** is a device which provides air from a stationary storage cylinder through a high pressure hose. SARs include an escape cylinder with at least five minutes of breathing air.

2.15 The **Self-Contained Breathing Apparatus (SCBA)** is an atmosphere supplying respirator for which the breathing air source is designed to be carried by the user.

2.16 A **Trans-Fill System** is a trans-fill hose and fittings, which allows two users of similarly equipped SCBA to share a common air supply during an emergency situation.

2.17 **Using SCBA** refers wearing full protective gear, SCBA in place, facepiece on, breathing from the SCBA, and PASS device activated.

2.18 **Wearing SCBA** refers to full protective gear, SCBA in place, facepiece ready for use, not breathing from the SCBA, and PASS device, if not an integral part of the air supply, activated.

2.19 **29 CFR 1910.134** is a respiratory protection standard issued by the United States Department of Labor, Occupational Safety and Health Administration (OSHA) that provides rules and regulations on the selection, maintenance and use of self contained breathing apparatus.

3 GENERAL USER/EQUIPMENT GUIDELINES

3.1 Personnel using SCBA must operate in crews of two or more when entering an IDLH atmosphere. Contact among crew members is to be visual and/or verbal at all times. They should remain in close proximity to each other, enabling them to provide mutual assistance in case of an emergency.

3.2 The SCBA/SAR will operate only in the positive pressure mode. SCBA must have a minimum rated service duration of 30 minutes. In the absence of an integrated PASS device, personnel must activate an independent PASS device prior to entering the hot zone, and the PASS device must remain in the active mode until the member exits the hot zone.

3.3 Disposable Air Purifying Particulate Filter Respirators will be provided for pre-hospital medical care. These respirators must meet at least the minimum standards of

protection as defined in NIOSH Standard 42 CFR 84. All personnel will follow DFRS's policy on Infection Control regarding levels of personal protection in dealing with patients that may create an exposure hazard.

4 GUIDELINES FOR RESPIRATORY PROTECTION CERTIFICATIONS AND FIT TESTING

4.1 All personnel who may be exposed to IDLH atmospheres must use RPE. Personnel who are required to use RPE must be medically certified by a Licensed Health Care Provider (LHCP).

4.1.1 At a minimum, medical certification must follow the guidelines provided in 29 CFR 1910.134, attachment C.

4.1.2 Records of medical certification for the use of RPE will be maintained with personnel health records. LHCP must advise the Fire Chief or designee of personnel who are not qualified to use RPE.

5 GUIDELINES FOR SCBA TRAINING AND ANNUAL RECERTIFICATION

5.1 All personnel must receive initial SCBA training as part of the Essentials of Firefighting course (or through an approved equivalent program), and annual recertification through the in-service training program.

5.1.1 The Training Division is responsible for distributing SCBA training materials.

5.1.2 DFRS Battalion Chiefs or volunteer department training coordinators must ensure that the SCBA training distributed by the DFRS Training Division is completed in their districts and in their stations, and that Level I Instructors are available for recertification and other SCBA training.

5.1.3 The training program for initial and annual recertification must include at least these elements:

5.1.3.1 Construction and operation of SCBA;

5.1.3.2 IDLH atmosphere identification;

5.1.3.3 Recognition of medical signs and symptoms that may limit or prevent the effective use of respirators;

5.1.3.4 A "Skills to be Completed" checklist;

5.1.3.5 Failures and emergency procedures;

5.1.3.6 Reporting procedures for defective SCBA;

5.1.3.7 Record keeping; and,

5.1.3.8 Routine station maintenance after use.

5.1.4 Personnel who have not participated in field operations for six months or longer must complete a re-entry program that includes SCBA recertification.

5.1.5 The Fire Chief or designee must maintain records of this training.

6 GUIDELINES FOR USING AND WEARING RESPIRATORY PROTECTION EQUIPMENT

6.1 All personnel who may be exposed to IDLH atmospheres must wear SCBA. They may be required to use SCBA during the attack and overhaul of fires, or while working at any other incident.

6.2 The RPE must be worn until command determines the atmosphere is safe. Personnel may voluntarily continue to wear RPE after command has determined that it can be removed.

7 GUIDELINES FOR FACEPIECES

7.1 All personnel must be provided with a correctly fitted facepiece. Correct facepiece fit will be determined by a quantitative fit test (QNFT) or qualitative fit test (QLFT) pursuant to 29 CFR 1910.134: Fit Testing (Attachment A).

7.2 Personnel will be tested during initial recruit/probationary training, annually, and when a new facepiece design is adopted. Only personnel who have been trained in the fit testing procedure will conduct the quantitative fit testing.

7.2.1 Records of facepiece testing will be kept at the station and copies will be sent to the Breathing Apparatus Repair Shop.

7.3 Personnel who are required to use RPE must not allow any object to enter or pass through the area where the facepiece must seal with the face or interfere with exhalation valve operation.

7.3.1 Helmets, head coverings, and protective hoods must be worn outside the facepiece seal, head harness and straps.

7.3.2 Personnel who are required to use RPE must not have beards or facial hair that interferes with the facepiece seal.

7.3.3 Personnel who wear eyeglasses must not use frames that interrupt the seal area of the facepiece. HCFR will provide spectacle kits for personnel.

7.3.4 Personnel who are required to use RPE must not wear hard contact lenses; however, they may wear soft contact lenses.

7.4 If the LHCP determines during routine medical examinations that an individual may not be able to obtain a facepiece seal because of physical changes (weight loss, dental work, etc.), LHCP staff must recommend to the Fire Chief or designee that a

supplemental fit test be performed.

7.4.1 Each user is to check his/her facepiece seal pursuant to 29 CFR 1910.134 : User Seal Check Procedures (Attachment B).

7.5 Personnel will be fit tested when they report problems related to obtaining a facepiece seal, or if supervisory or LHCP staff observe conditions (such as excessive weight loss) that could affect a proper fit.

7.6 Personnel must not risk exposure by removing the facepiece or disconnecting the regulator in hazardous atmospheres.

7.7 Personnel who detect vapor or gas breakthrough, changes in breathing resistance, or facepiece leakage must leave the IDLH atmosphere and must not re-enter until the problem has been resolved. If a maintenance problem may be the cause, the unit must be taken out of service and repaired pursuant to Section 9 of this policy.

7.8 Each primary piece of apparatus will carry one medium facepiece for each SCBA on the unit.

7.9 Small and large facepieces will be made available.

8 GUIDELINES FOR TRANS-FILL SYSTEMS

8.1 The Trans-Fill system connection may be used when a system fails or the firefighter depletes the air supply of the cylinder in use.

8.1.1 The Trans-Fill system may be used only by personnel who have been trained in its use, and according to manufacturer's instructions.

8.1.2 Trans-filling between two users of SCBA should only be attempted during life threatening emergency situations, or during simulated training exercises. After trans-filling, both donor and receiver must return to fresh air immediately.

8.1.3 Trans-filling shall not be attempted from one SCBA to another SCBA if the donor's audible alarm is ringing.

9 GUIDELINES FOR SCBA MAINTENANCE AND REPAIR REQUIREMENTS

9.1 An SCBA unit must be taken out of service when any defect is found in its assembly.

9.2 An SCBA repair tag must be completed and attached to the unit, and notification

must be made to the Breathing Apparatus Repair Shop.

9.2.1 If maintenance is required, the unit must be transported to the assigned maintenance facility. It may be returned to operational status after shop maintenance has been completed.

9.3 An SCBA used by a firefighter who suffers respiratory injuries, burn injuries, or line of duty death must be impounded by the Incident Commander. The unit's identification must include the name of the user, the date and location of the incident, and a description of the problem. The Incident Commander must take possession of the unit and all appropriate documentation and deliver it to the Health and Safety Officer or designee. All personnel who have handled the respirator involved must sign off on the documentation as the unit is transferred to the Health and Safety Officer.

9.4 All SCBA must be inspected, cleaned and disinfected pursuant to 29 CFR 1910.134: Respirator Cleaning Procedures (Attachment C), and serviced after each use according to the manufacturer's recommendations. Routine inspections, in-station preventive maintenance, and annual maintenance must also comply with the manufacturer's requirements.

9.4.1 In-station inspections must be logged on forms provided by DFRS. Station officers must ensure that these forms are used daily and monthly, and that the unit is identified either by its serial number or a number the station assigned to that unit. The forms below must be used:

9.4.1.1 Daily/weekly vehicle inspection forms used in each station; and

9.4.1.2 Breathing Apparatus Monthly Inspection forms (Attachment D)

9.4.2 Original copies of these reports must be stored in the station for 12 months and a copy must be sent to the Breathing Apparatus Repair Shop on a monthly basis.

9.4.3 All SCBA carried on first-line response units must be inspected daily, before and after use.

9.4.4 All SCBA carried on staff vehicles must be inspected weekly.

9.4.5 All SCBA at the training academy must be inspected before and after use on the days the equipment is used.

9.4.6 All SAR must be inspected daily.

9.4.7 Individual facepieces must be inspected before and after use.

9.5 All SCBA/SAR must receive both preventive maintenance and shop maintenance. All maintenance performed on SCBA must comply with the manufacturer's manual for operations and maintenance. Deviations may be permitted only if authorized in

writing by the manufacturer.

9.5.1 SCBA must receive a complete preventive maintenance inspection on a monthly basis, in accordance with the manufacturer's recommendations.

9.5.2 SCBA must receive periodic shop maintenance, performed by employees who have been trained and certified by the manufacturer.

9.5.3 Individual facepieces must receive preventative maintenance during fit testing.

10 GUIDELINES FOR SCBA/SAR RECORDS

10.1 A records program must be established and maintained for all SCBA/SAR.

10.2 The records program begins with receipt of the unit and ends with its disposal. Documentation must include a complete history of all maintenance performed on any component.

10.3 Records must be established for the regulator, back-pack assembly, and cylinders.

10.4 Each completed assembly must be identified by a station number tag.

11 GUIDELINES FOR CYLINDER AND COMPRESSED BREATHING AIR TESTING AND MAINTENANCE

11.1 Compressed breathing air used in breathing apparatus must meet the requirements of NFPA 1500, Compressed Gas Association, G-7.1, 1992 Edition, commodity specification for air. The minimum air quality is Grade E, with a water vapor level of less than 24 ppm and dew point of -65°F.

11.2 All cylinders must be maintained in accordance with the Compressed Gas Association and SCBA manufacturer's requirements.

11.2.1 SCBA cylinders must be maintained in a fully charged state.

11.2.2 SCBA cylinders must be hydrostatically tested according to the manufacturer's recommendations, normally every three years. These tests must comply with the United States Department of Transportation's rules and regulations.

11.3 Sources of compressed gas breathing air, such as compressors, cascade systems, and storage receivers used for filling SCBA cylinders, must be tested at least every three months.

11.3.1 Breathing air compressors must be maintained according to the manufacturer's recommendations.

11.3.2 A compressor operational log must be maintained at every facility where compressed air is manufactured.

11.3.3 Maintenance records will be kept for all preventative maintenance, repairs and filter changes. Records will be kept at the station and copies will be sent to the Breathing Apparatus Repair Shop.

12 GUIDELINES FOR DFRS PERSONNEL RESPONSIBILITIES

12.1 All personnel must ensure that their SCBA is in working order and ready for use with the correctly sized facepiece when they are assigned a riding position, before entering an IDLH atmosphere, and after each use.

12.2 All officers must require their personnel to follow these procedures to ensure their personal safety.

12.3 The Health and Safety Officer and SCBA Workgroup is responsible for reviewing, evaluating, and making appropriate recommendations on the Respiratory Protection Program as outlined in 29 CFR 1910.134 (I): Program evaluation (Attachment E).

Approved:

Joseph A. Herr
Fire Chief

(3) The test subject shall be allowed to smell a weak concentration of the irritant smoke before the respirator is donned to become familiar with its irritating properties and to determine if he/she can detect the irritating properties of the smoke. The test operator shall carefully direct a small amount of the irritant smoke in the test subject's direction to determine that he/she can detect it.

(c) Irritant Smoke Fit Test Procedure

(1) The person being fit tested shall don the respirator without assistance, and perform the required user seal check(s).
(2) The test subject shall be instructed to keep his/her eyes closed.
(3) The test operator shall direct the stream of irritant smoke from the smoke tube toward the faceseal area of the test subject, using the low flow pump or the squeeze bulb. The test operator shall begin at least 12 inches from the facepiece and move the smoke stream around the whole perimeter of the mask. The operator shall gradually make two more passes around the perimeter of the mask, moving to within six inches of the respirator.
(4) If the person being tested has not had an involuntary response and/or detected the irritant smoke, proceed with the test exercises.
(5) The exercises identified in section I.A.14. of this attachment shall be performed by the test subject while the respirator seal is being continually challenged by the smoke, directed around the perimeter of the respirator at a distance of six inches.
(6) If the person being fit tested reports detecting the irritant smoke at any time, the test is failed. The person being retested must repeat the entire sensitivity check and fit test procedure.
(7) Each test subject passing the irritant smoke test without evidence of a response (involuntary cough, irritation) shall be given a second sensitivity screening check, with the smoke from the same smoke tube used during the fit test, once the respirator has been removed, to determine whether he/she still reacts to the smoke. Failure to evoke a response shall void the fit test.
(8) If a response is produced during this second sensitivity check, then the fit test is passed.

29 CFR 1910.134: Fit Testing

Part I. OSHA-Accepted Fit Test Protocols

Fit Testing Procedures—General Requirements

The employer shall conduct fit testing using the following procedures. The requirements in this appendix apply to all OSHA-accepted fit test methods, both QLFT and QNFT.

1. The test subject shall be allowed to pick the most acceptable respirator from a sufficient number of respirator models and sizes so that the respirator is acceptable to and correctly fits, the user.

2. Prior to the selection process, the test subject shall be shown how to put on a respirator, how it should be positioned on the face, and how to set strap tension and how to determine an acceptable fit. A mirror shall be available to assist the subject in evaluating the fit and positioning of the respirator. This instruction may not constitute the subject's formal training on respirator use, because it is only a review.

3. The test subject shall be informed that he/she is being asked to select the respirator that provides the most acceptable fit. Each respirator represents a different size and shape, and if fitted and used properly, will provide adequate protection.

4. The test subject shall be instructed to hold each chosen facepiece up to the face and eliminate those that obviously do not give an acceptable fit.

5. The more acceptable facepieces are noted in case the one selected proves unacceptable; the most comfortable mask is donned and worn at least five minutes to assess comfort. Assistance in assessing comfort can be given by discussing the points in the following item. If the test subject is not familiar with using a particular respirator, the test subject shall be directed to don the mask several times and to adjust the straps each time to become adept at setting proper tension on the straps.

6. Assessment of comfort shall include a review of the following points with the test subject and allowing the test subject adequate time to determine the comfort of the respirator:

    (a) Position of the mask on the nose
    (b) Room for eye protection
    (c) Room to talk
    (d) Position of mask on face and cheeks

7. The following criteria shall be used to help determine the adequacy of the respirator fit:
   (a) Chin properly placed;
   (b) Adequate strap tension, not overly tightened;
   (c) Fit across nose bridge;
   (d) Respirator of proper size to span distance from nose to chin;
   (e) Tendency of respirator to slip;
   (f) Self-observation in mirror to evaluate fit and respirator position.

8. The test subject shall conduct a user seal check, either the negative and positive pressure seal checks described in Attachment B of this policy or those recommended by the respirator manufacturer which provide equivalent protection to the procedures in Attachment B. Before conducting the negative and positive pressure checks, the subject shall be told to seat the mask on the face by moving the head from side-to-side and up and down slowly while taking in a few slow deep breaths. Another facepiece shall be selected and retested if the test subject fails the user seal check tests.

9. The test shall not be conducted if there is any hair growth between the skin and the facepiece sealing surface, such as stubble, beard growth, mustache, or sideburns which cross the respirator sealing surface. Any type of apparel which interferes with a satisfactory fit shall be altered or removed.

10. If a test subject exhibits difficulty in breathing during the tests, she or he shall be referred to a physician or other licensed health care professional, as appropriate, to determine whether the test subject can wear a respirator while performing her or his duties.

11. If the employee finds the fit of the respirator unacceptable, the test subject shall be given the opportunity to select a different respirator and to be retested.

12. Exercise regimen: Prior to the commencement of the fit test, the test subject shall be given a description of the fit test and the test subject's responsibilities during the test procedure. The description of the process shall include a description of the test exercises that the subject will be performing. The respirator to be tested shall be worn for at least 5 minutes before the start of the fit test.

13. The fit test shall be performed while the test subject is wearing any applicable safety equipment that may be worn during actual respirator use which could interfere with respirator fit.

14. Test Exercises: (a) The following test exercises are to be performed for all fit testing methods prescribed in this attachment except for the CNP method. A separate fit testing exercise regimen is contained in the CNP protocol. The test subject shall perform exercises, in the test environment, in the following manner:

    (1) Normal breathing. In a normal standing position, without talking, the subject shall breathe normally.

(2) Deep breathing. In a normal standing position, the subject shall breathe slowly and deeply, taking caution so as not to hyperventilate.

(3) Turning head side to side. Standing in place, the subject shall slowly turn his/her head from side to side between the extreme positions on each side. The head shall be held at each extreme momentarily so the subject can inhale at each side.

(4) Moving head up and down. Standing in place, the subject shall slowly move his/her head up and down. The subject shall be instructed to inhale in the up position (i.e., when looking toward the ceiling).

(5) Talking. The subject shall talk out loud slowly and loud enough so as to be heard clearly by the test conductor. The subject can read from a prepared text such as the Rainbow Passage, count backward from 100, or recite a memorized poem or song.

Rainbow Passage

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond reach, his friends say he is looking for the pot of gold at the end of the rainbow.

(6) Grimace. The test subject shall grimace by smiling or frowning. (This applies only to QNFT testing; it is not performed for QLFT)

(7) Bending over. The test subject shall bend at the waist as if he/she were to touch his/her toes. Jogging in place shall be substituted for this exercise in those test environments such as shroud type QNFT or QLFT units that do not permit bending over at the waist.

(8) Normal breathing. Same as exercise (1).

Each test exercise shall be performed for one minute except for the grimace exercise which shall be performed for 15 seconds. The test subject shall be questioned by the test conductor regarding the comfort of the respirator upon completion of the protocol. If it has become unacceptable, another model of respirator shall be tried. The respirator shall not be adjusted once the fit test exercises begin. Any adjustment voids the test, and the fit test must be repeated.

Ambient aerosol condensation nuclei counter (CNC) quantitative fit testing protocol.

The ambient aerosol condensation nuclei counter (CNC) quantitative fit testing (Portacount ™) protocol quantitatively fit tests respirators with the use of a probe. The probed respirator is only used for quantitative C fit tests. A probed respirator has a special sampling device, installed on the respirator, that allows the probe to sample the air from inside the mask. A probed respirator is required for each make, style, model, and size that the employer uses and can be obtained from

the respirator manufacturer or distributor. The CNC instrument manufacturer, TSI Inc., also provides probe attachments (TSI sampling adapters) that permit fit testing in an employee's own respirator. A minimum fit factor pass level of at least 100 is necessary for a half-mask respirator and a minimum fit factor pass level of at least 500 is required for a full facepiece negative pressure respirator. The entire screening and testing procedure shall be explained to the test subject prior to the conduct of the screening test.

(a) Portacount Fit Test Requirements.

(1) Check the respirator to make sure the respirator is fitted with a high-efficiency filter and that the sampling probe and line are properly attached to the facepiece.
(2) Instruct the person to be tested to don the respirator for five minutes before the fit test starts. This purges the ambient particles trapped inside the respirator and permits the wearer to make certain the respirator is comfortable. This individual shall already have been trained on how to wear the respirator properly.
(3) Check the following conditions for the adequacy of the respirator fit: Chin properly placed: Adequate strap tension, not overly tightened; Fit across nose bridge; Respirator of proper size to span distance from nose to chin: Tendency of the respirator to slip: Self-observation in a mirror to evaluate fit and respirator position.
(4) Have the person wearing the respirator do a user seal check. If leakage is detected, determine the cause. If leakage is from a poorly fitting facepiece, try another size of the same model respirator, or another model of respirator.
(5) Follow the manufacturer's instructions for operating the Portacount and proceed with the test.
(6) The test subject shall be instructed to perform the exercises in Part I A. #14 of this attachment.
(7) After the test exercises, the test subject shall be questioned by the test conductor regarding the comfort of the respirator upon completion of the protocol. If it has become unacceptable, another model of respirator shall be tried.

(b) Portacount Test Instrument.

(1) The Portacount will automatically stop and calculate the overall fit factor for the entire set of exercises. The overall fit factor is what counts. The Pass or Fail message will indicate whether or not the test was successful. If the test was a Pass, the fit test is over.
(2) Since the pass or fail criterion of the Portacount is user programmable, the test operator shall ensure that the pass or fail criterion meet the requirements for minimum respirator performance in this attachment.
(3) A record of the test needs to be kept on file, assuming the fit test was successful. The record must contain the test subject's name; overall fit factor; make, model, style, and size of respirator used; and date tested.

Qualitative Fit Test (QLFT) Protocols

1. General

(a) The employer shall ensure that persons administering QLFT are able to prepare test solutions, calibrate equipment and perform tests properly, recognize invalid tests, and ensure that test equipment is in proper working order.

(b) The employer shall ensure that QLFT equipment is kept clean and well maintained so as to operate within the parameters for which it was designed.

Isoamyl Acetate Protocol

Note: This protocol is not appropriate to use for the fit testing of particulate respirators. If used to fit test particulate respirators, the respirator must be equipped with an organic vapor filter

(a) Odor Threshold Screening
Odor threshold screening, performed without wearing a respirator, is intended to determine if the individual tested can detect the odor of isoamyl acetate at low levels.

(1) Three 1 liter glass jars with metal lids are required.
(2) Odor-free water (e.g., distilled or spring water) at approximately 25° C (77° F) shall be used for the solutions.
(3) The isoamyl acetate (IAA) (also known at isopentyl acetate) stock solution is prepared by adding 1 ml of pure IAA to 800 ml of odor-free water in a 1 liter jar, closing the lid and shaking for 30 seconds. A new solution shall be prepared at least weekly.
(4) The screening test shall be conducted in a room separate from the room used for actual fit testing. The two rooms shall be well-ventilated to prevent the odor of IAA from becoming evident in the general room air where testing takes place.
(5) The odor test solution is prepared in a second jar by placing 0.4 ml of the stock solution into 500 ml of odor-free water using a clean dropper or pipette. The solution shall be shaken for 30 seconds and allowed to stand for two to three minutes so that the IAA concentration above the liquid may reach equilibrium. This solution shall be used for only one day.
(6) A test blank shall be prepared in a third jar by adding 500 cc of odor-free water.
(7) The odor test and test blank jar lids shall be labeled (e.g., 1 and 2) for jar identification. Labels shall be placed on the lids so that they can be peeled off periodically and switched to maintain the integrity of the test.
(8) The following instruction shall be typed on a card and placed on the table in front of the two test jars (i.e., 1 and 2): "The purpose of this test is to determine if you can smell banana oil at a low concentration. The two bottles in front of you contain water. One of these bottles also contains a small amount of banana oil. Be sure the covers are on tight, then shake each bottle for two seconds. Unscrew the lid of each bottle, one at a time,

and sniff at the mouth of the bottle. Indicate to the test conductor which bottle contains banana oil."

(9) The mixtures used in the IAA odor detection test shall be prepared in an area separate from where the test is performed, in order to prevent olfactory fatigue in the subject.

(10) If the test subject is unable to correctly identify the jar containing the odor test solution, the IAA qualitative fit test shall not be performed.

(11) If the test subject correctly identifies the jar containing the odor test solution, the test subject may proceed to respirator selection and fit testing.

(b) Isoamyl Acetate Fit Test

(1) The fit test chamber shall be a clear 55-gallon drum liner suspended inverted over a 2-foot diameter frame so that the top of the chamber is about 6 inches above the test subject's head. If no drum liner is available, a similar chamber shall be constructed using plastic sheeting. The inside top center of the chamber shall have a small hook attached.

(2) Each respirator used for the fitting and fit testing shall be equipped with organic vapor cartridges or offer protection against organic vapors.

(3) After selecting, donning, and properly adjusting a respirator, the test subject shall wear it to the fit testing room. This room shall be separate from the room used for odor threshold screening and respirator selection, and shall be well-ventilated, as by an exhaust fan or lab hood, to prevent general room contamination.

(4) A copy of the test exercises and any prepared text from which the subject is to read shall be taped to the inside of the test chamber.

(5) Upon entering the test chamber, the test subject shall be given a 6-inch by 5-inch piece of paper towel, or other porous, absorbent, single-ply material, folded in half and wetted with 0.75 ml of pure IAA. The test subject shall hang the wet towel on the hook at the top of the chamber. An IAA test swab or ampule may be substituted for the IAA wetted paper towel provided it has been demonstrated that the alternative IAA source will generate an IAA test atmosphere with a concentration equivalent to that generated by the paper towel method.

(6) Allow two minutes for the IAA test concentration to stabilize before starting the fit test exercises. This would be an appropriate time to talk with the test subject; to explain the fit test, the importance of his/her cooperation, and the purpose for the test exercises; or to demonstrate some of the exercises.

(7) If at any time during the test, the subject detects the banana-like odor of IAA, the test is failed. The subject shall quickly exit from the test chamber and leave the test area to avoid olfactory fatigue.

(8) If the test is failed, the subject shall return to the selection room and remove the respirator. The test subject shall repeat the odor sensitivity test, select and put on another respirator, return to the test area and again begin the fit test procedure described in (b) (1) through (7) above. The process continues until a respirator that fits well has been found. Should the odor sensitivity test be failed, the subject

shall wait at least 5 minutes before retesting. Odor sensitivity will usually have returned by this time.

(9) If the subject passes the test, the efficiency of the test procedure shall be demonstrated by having the subject break the respirator face seal and take a breath before exiting the chamber.

(10) When the test subject leaves the chamber, the subject shall remove the saturated towel and return it to the person conducting the test, so that there is no significant IAA concentration buildup in the chamber during subsequent tests. The used towels shall be kept in a self-sealing plastic bag to keep the test area from being contaminated.

Irritant Smoke (Stannic Chloride) Protocol

This qualitative fit test uses a person's response to the irritating chemicals released in the "smoke" produced by a stannic chloride ventilation smoke tube to detect leakage into the respirator.

(a) General Requirements and Precautions

(1) The respirator to be tested shall be equipped with high efficiency particulate air (HEPA) or P100 series filter(s).

(2) Only stannic chloride smoke tubes shall be used for this protocol.

(3) No form of test enclosure or hood for the test subject shall be used.

(4) The smoke can be irritating to the eyes, lungs, and nasal passages. The test conductor shall take precautions to minimize the test subject's exposure to irritant smoke. Sensitivity varies, and certain individuals may respond to a greater degree to irritant smoke. Care shall be taken when performing the sensitivity screening checks that determine whether the test subject can detect irritant smoke to use only the minimum amount of smoke necessary to elicit a response from the test subject.

(5) The fit test shall be performed in an area with adequate ventilation to prevent exposure of the person conducting the fit test or the build-up of irritant smoke in the general atmosphere.

(b) Sensitivity Screening Check

The person to be tested must demonstrate his or her ability to detect a weak concentration of the irritant smoke.

(1) The test operator shall break both ends of a ventilation smoke tube containing stannic chloride, and attach one end of the smoke tube to a low flow air pump set to deliver 200 milliliters per minute, or an aspirator squeeze bulb. The test operator shall cover the other end of the smoke tube with a short piece of tubing to prevent potential injury from the jagged end of the smoke tube.

(2) The test operator shall advise the test subject that the smoke can be irritating to the eyes, lungs, and nasal passages and instruct the subject to keep his/her eyes closed while the test is performed.

29 CFR 1910.134: User Seal Check Procedures

The Individual who uses a tight-fitting respirator is to perform a user seal check to ensure that an adequate seal is achieved each time the respirator is put on. Either the positive and negative pressure checks listed in this appendix, or the respirator manufacturer's recommended user seal check method shall be used. User seal checks are not substitutes for qualitative or quantitative fit tests.

I. Facepiece Positive and/or Negative Pressure Checks

A. *Positive pressure check.* Close off the exhalation valve and exhale gently into the facepiece. The face fit is considered satisfactory if a slight positive pressure can be built up inside the facepiece without any evidence of outward leakage of air at the seal. For most respirators this method of leak testing requires the wearer to first remove the exhalation valve cover before closing off the exhalation valve and then carefully replacing it after the test.

B. *Negative pressure* check. Close off the inlet opening of the canister or cartridge(s) by covering with the palm of the hand(s) or by replacing the filter seal(s), inhale gently so that the facepiece collapses slightly, and hold the breath for ten seconds. The design of the inlet opening of some cartridges cannot be effectively covered with the palm of the hand. The test can be performed by covering the inlet opening of the cartridge with a thin latex or nitrile glove. If the facepiece remains in its slightly collapsed condition and no inward leakage of air is detected, the tightness of the respirator is considered satisfactory.

II. Manufacturer's Recommended User Seal Check Procedures

The respirator manufacturer's recommended procedures for performing a user seal check may be used instead of the positive and/or negative pressure check procedures provided that the employer demonstrates that the manufacturer's procedures are equally effective.

29 CFR 1910.134: Respirator Cleaning Procedures

These procedures are provided for employer use when cleaning respirators. They are general in nature, and the employer as an alternative may use the cleaning recommendations provided by the manufacturer of the respirators used by their employees, provided such procedures are as effective as those listed below. Equivalent effectiveness simply means that the procedures used must accomplish the objectives set forth below, i.e., must ensure that the respirator is properly cleaned and disinfected in a manner that prevents damage to the respirator and does not cause harm to the user.

I. Procedures for Cleaning Respirators

A. Remove filters, cartridges, or canisters. Disassemble facepieces by removing speaking diaphragms, demand and pressure-demand valve assemblies, hoses, or any components recommended by the manufacturer. Discard or repair any defective parts.

B. Wash components in warm (43°C [100°F] maximum) water with a mild detergent or with a cleaner recommended by the manufacturer. A stiff bristle (not wire) brush may be used to facilitate the removal of dirt.

C. Rinse components thoroughly in clean,warm (43°C [100°F] maximum), preferably running water. Drain.

D. When the cleaner used does not contain a disinfecting agent, respirator components should be immersed for two minutes in one of the following:
   1. Hypochlorite solution (50 ppm of chlorine) made by adding approximately one milliliter of laundry bleach to one liter of water at (43°C [100°F] maximum); or,
   2. Aqueous solution of iodine (50 ppm iodine) made by adding approximately 0.8 milliliters of tincture of iodine (6 - 8 grams ammonium and/or potassium iodide/100 cc of 45% alcohol) to one liter of water at (43°C [100°F] maximum); or
   3. Other commercially available cleansers of equivalent disinfectant quality when used as directed, if their use is recommended or approved by the respirator manufacturer.

E. Rinse components thoroughly in clean, warm (43°C [100°F] maximum), preferably running water. Drain. The importance of thorough rinsing cannot be overemphasized. Detergents or disinfectants that dry on facepieces may result in dermatitis. In addition, some disinfectants may cause deterioration of rubber or corrosion of metal parts if not completely removed.

F. Components should be hand-dried with a clean lint-free cloth or air-dried.

G. Reassemble facepiece, replacing filters, cartridges, and canisters where necessary.

H. Test the respirator to ensure that all components work properly.

29 CFR 1910.134 (I): Program evaluation

This section requires the employer to conduct evaluations of the workplace to ensure that the written respiratory protection program is being properly implemented, and to consult employees to ensure that they are using the respirators properly.

(1) The employer shall conduct evaluations of the workplace as necessary to ensure that the provisions of the current written program are being effectively implemented and that it continues to be effective.

(2) The employer shall regularly consult employees required to use respirators to assess the employees views on program effectiveness and to identify any problems. Any problems that are identified during this assessment shall be corrected. Factors to be assessed include, but are not limited to:

(i) Respirator fit (including the ability to use the respirator without interfering with effective workplace performance);

(ii) Appropriate respirator selection is for the hazards to which the employee is exposed;

(iii) Proper respirator use under the workplace conditions the employee encounters; and,

(iv) Proper respirator maintenance.

Station ___

Masks

Unit #	Date Inspected	Location	Cylinder Pressure	Regulator & Audi-Larm OK	Facepiece OK	Harness OK	Cleaned & Sanitized	Comments	Initials

Please Fax to Breathing Apparatus Repair Shop (410) 313-2652

Station ___

Cylinders

Cylinder	Location	Hydro Date	Comments

Cylinder	Location	Hydro Date	Comments

Please Fax to Breathing Apparatus Repair Shop (410) 313-2652

29 CFR 1910.134 (I): Program evaluation

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(ii) Appropriate respirator selection is for the hazards to which the employee is exposed;

(iii) Proper respirator use under the workplace conditions the employee encounters; and,

(iv) Proper respirator maintenance.

General Order 150.18: Carcinogen Exposure Reduction Plan

Howard County Department of Fire and Rescue Services

GENERAL ORDER

GENERAL ORDER 150.18

CARCINOGEN EXPOSURE REDUCTION PLAN

BUREAU OF OCCUPATIONAL SAFETY AND HEALTH

Issue Date: February 21, 2018
Revision Date: N/A

APPLICABILITY

All Personnel

POLICY

In an effort to further the Howard County Department of Fire and Rescue Services' (Department) Bureau of Occupational Safety and Health's (BOSH) mission of developing and maintaining an innovative Occupational Safety and Health Program, a Carcinogen Exposure Reduction Plan (CERP) has been developed. This policy lays out the procedures for reducing the exposure times and quantities to carcinogens that are encountered in the firefighting profession.

DEFINITIONS

- **Advanced Cleaning** – Cleaning of Personal Protective Equipment (PPE) performed by trained personnel with the elements out of service and performed periodically as required. Advanced Cleaning is performed in machines with approved detergents, cleaners, and disinfectants, and shall be documented.

- **Firefighter Cancer Support Network (FCSN)** – An organization dedicated to assisting firefighters who have been diagnosed with cancer. In August 2013, FCSN published a white paper with 11 recommendations to reduce the incidence of cancer within the fire service.

- **National Fire Protection Association (NFPA)** – The National Fire Protection Association, a global nonprofit organization, established in 1896, devoted to eliminating death, injury, property and economic loss due to fire, electrical and related hazards.

- **Routine Cleaning** – A light cleaning of PPE performed by the end user without taking the elements out of service and performed after each use. Routine Cleaning is performed by hand only, and does not need to be documented.

PROCEDURES

General:

- Officers:
  - As the leader of the functional unit in the fire service, the company officer is the most influential person in regards to attitude, habits, and implementation of change. To this extent, the company officer must set clear expectations and lead by example by following and promoting the requirements in this policy.

- All personnel:
  - Personnel shall make efforts to reduce both the amount of time and the quantity of carcinogens to which they are exposed. This will be accomplished by following currently accepted best practices in the following areas:
    - Respiratory Protection
    - Cleaning of PPE
    - Laundering of Uniforms
    - Decontamination of Personnel
    - Storage and Transportation of PPE
    - Use of Diesel Exhaust Capture Systems
    - Tobacco Cessation

Use of Turnout Gear:

- Turnout gear shall only be worn on incidents in which its protection is needed, or may be needed. These incidents may include, but are not limited to: fires of any kind, vehicle rescues, fire alarms, flammable gas emergencies, etc.

Respiratory Protection:

- Several studies have demonstrated that carcinogenic agents can be present in compartments long after a fire is extinguished. Studies have also demonstrated that the levels of carbon monoxide present after a fire are poorly correlated with these other dangerous agents. (Oregon Study) To that extent, once the decision to use SCBA has been made, its use shall be continued throughout all phases of the incident to include salvage, overhaul, and origin and cause determination.

Incident commanders shall have the authority to modify respiratory protection requirements for exigent circumstances. These instances should be rare and shall require the following:

- The incident commander (or their designee) shall document the names of the members who worked in the post-fire environment without SCBA.
- The incident commander (or their designee) shall document the length of time that each member worked in the post-fire environment without SCBA.
- The incident commander shall submit justification for the exigency exception in writing to the Assistant Chief of BOSH and the Assistant Chief of ESB by the end of the shift.

Cleaning of PPE:

Barring exigent circumstances such as extreme weather, safety concerns, or depleted County-wide apparatus availability, the following shall be accomplished before leaving the incident scene. In accordance with NFPA 1851, Chapter 7, as soon as practical after exposure to the products of combustion, or other carcinogenic materials, personnel shall:

- Evaluate the level of contamination and initiate Routine Cleaning while still at the incident scene.
- Brush off any dry debris.
- Rinse off any other debris with water. Heavy scrubbing or the use of high velocity or high pressure water jets (such as a pressure washer) shall be avoided.
- When necessary, a soft bristle brush shall be used to gently scrub and the ensemble shall be rinsed again.
    - Soft bristled brushes dedicated to the cleaning of PPE shall be carried on all front line suppression equipment to prevent cross contamination with products that could degrade the PPE.
    - Stiff bristled brushes, such as floor brushes or wheel/tire brushes, shall not be used as they could damage the PPE.
- In the event that the PPE is contaminated to the point where the above procedures are insufficient, personnel shall place the items out of service and send them to the supply unit for Advanced Cleaning.
- SCBA and SCBA elements shall be rinsed and brushed in accordance with the manufacturer's recommendations.

Laundering of Clothing:

As soon as practical after returning to quarters, the officer or his or her designee shall ensure that all clothing uniforms worn during the incident are laundered.

Decontamination of Personnel:

Multiple studies have confirmed that there is a marked increase in skin permeability and absorption as skin temperature and moisture rise. Data has shown that absorption can increase by 400% for every 5° F increase in skin temperature. (Cancer Support Network) With this in mind, it is essential that personnel decontaminate themselves as soon as practicable after an incident by:

- Using commercially available wipes that are specifically designed for firefighting to remove as much gross contaminate as possible. Personnel shall clean all exposed skin, paying special attention to the neck, angle of the jaw, face, hands, and under arms.
    - Barring exigent circumstances such as extreme weather, safety concerns, or depleted County-wide apparatus availability, this shall be accomplished before leaving the incident scene.
- Personnel should shower immediately upon returning to quarters. Out of service time should be provided for this if staffing and apparatus availability allow it.

Storage of PPE:

PPE can continue to off gas after exposure to the products of combustion. Every effort shall be made by personnel to not store turnout gear in their homes or their vehicles. All personnel are encouraged to store their gear in a fire station. Under no circumstances shall PPE be worn or stored in the residential areas of fire stations.

In the event that personnel must transport gear in their personal vehicles, the following precautions shall be taken:

- All PPE shall be transported in Department issued gear bags or hard sided containers.
- Whenever possible, gear shall be transported in cargo areas of the vehicle such as the trunk or bed of a pickup truck.

- Turnout gear shall not be stored in the passenger area of staff or command vehicles. If there is no other option due to the configuration of the vehicle, the gear shall be stored in a Department issued gear bag, or hard sided container.

Diesel Exhaust Mitigation:

Many agencies, including the World Health Organization, the Centers for Disease Control and Prevention, and the Environmental Protection Agency, classify diesel exhaust as possibly, potentially, or likely carcinogenic (Cancer.org). To that extent, all personnel shall familiarize themselves with GO 500.04: Diesel Exhaust Mitigation, and utilize the systems described therein.

Tobacco Cessation:

The Department discourages all personnel, and prohibits some, from using any form of tobacco products. Abstention from the use of tobacco products accomplishes:

- A reduction of health hazards associated with tobacco use.
- Delivery of higher quality service to the public because of improved physical fitness, endurance, and health.
- Safer performance of assigned duties by personnel due to improved physical condition.
- A cleaner and more pleasant environment at Department work sites.
- A reduction in health hazards as personnel will only be exposed to hazardous conditions directly related to fire and rescue work.

See General Order 130.03: Use of Tobacco Products.

Personnel who desire to stop using tobacco products can be assisted through a cessation program by contacting the Howard County Health Department at 410-313-6300.

REFERENCES

- General Order 130.03: Use of Tobacco Products
- General Order 500.04: Diesel Exhaust Mitigation
- NFPA 1500: *Standard on Fire Department Occupational Safety and Health Program*
- NFPA 1851: *Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting*
- NFPA: About Us, *available at:* http://www.nfpa.org/about-nfpa
- OSHA 29 CFR 1910.134: *Occupational Safety and Health Standard on Respiratory Protection*
- A Study on Chemicals found in the Overhaul Phase of Structure Fires using Advanced Portable Air Monitoring available for Chemical Speciation, *available at:* http://www.oregon.gov/osp/sfm/documents/airmonitoringreport.pdf
- Firefighter Cancer Support Network: Skin permeability, *available at:* http://www.nature.com/jid/journal/v41/n5/full/jid1963115a.html
- Cancer.org, Diesel Exhaust and Cancer, *available at:* http://www.cancer.org/cancer/cancercauses/othercarcinogens/pollution/diesel-exhaust-and-cancer

SUMMARY OF DOCUMENT CHANGES

New General Order

FORMS/ATTACHMENTS

- None

APPROVED

John S. Butler, Fire Chief
Office of the Fire Chief

Author:

David Reines, Captain
Office of the Fire Marshal

General Order 300.01: Chain of Command

Howard County Department of Fire and Rescue Services

GENERAL ORDER

GENERAL ORDER 300.01

Chain of Command

OFFICE OF THE FIRE CHIEF

Issue Date: May 03, 1984
Revision Date: November 18, 2016

APPLICABILITY

All career, volunteer, and contingent uniformed personnel.

POLICY

To establish standardized Administrative Chain of Command for classified employees, and an integrated Operational Chain-of-Command for the combination fire and rescue system in Howard County, MD.

DEFINITIONS

- None

PROCEDURES

ADMINISTRATIVE CHAIN OF COMMAND (SUPERVISION / DAILY WORKFLOW):
The daily operational chain of command for County classified uniformed employees shall be:

- Fire Chief
- Career Deputy Chief
- Career Assistant Chief
- Career Battalion Chief
- Career Fire Captain
- Career Fire Lieutenant
- Career Master Firefighter - Career Firefighter – Career Firefighter Recruit – Career Firefighter Trainee

*The Administrative Chain of Command is not meant to contradict with or disallow the assignment of any specific employee to a specific supervisor.

OPERATIONAL CHAIN OF COMMAND (EMERGENCY INCIDENTS / OPERATIONAL SITUATIONS):
The integrated operational incident chain of command for employees and volunteer emergency providers shall be:

- Fire Chief
- Career Deputy Chief

- Career Assistant Chief
- Volunteer Fire Chief
- Career Battalion Chief
- Volunteer Deputy Chief - Volunteer Assistant Chief
- Career Fire Captain
- Volunteer Fire Captain
- Career Fire Lieutenant
- Volunteer Fire Lieutenant
- Career Master Firefighter
- Career/Volunteer Firefighter
- Firefighter Recruit
- Volunteer EMS Officer* - Volunteer EMS-only Provider

*If also a Volunteer Firefighter, would have Volunteer Firefighter line authority.

REFERENCES

- GO 120.02: Volunteer Officer Requirements
- GO 100.04: Position Requirements – Licenses, Certifications, Experience, and Education Prerequisites

SUMMARY OF DOCUMENT CHANGES

- Aligned Volunteer Sergeant with Firefighter level line authority.
- Added Volunteer EMS Officer to the Operational Chain of Command
- Added the Volunteer EMS-only Provider to the Operational Chain of Command.
- Added qualifier regarding the administrative assignment of specific employees to specific supervisors.

FORMS/ATTACHMENTS

- None

APPROVED

John S. Butler, Fire Chief
Office of the Fire Chief

General Order 300.02: Personnel Accountability

DEPARTMENT OF FIRE AND RESCUE SERVICES

GENERAL ORDER
300.02

Originating From	Issue Date	Revision Date	Attachments
Emergency Services Bureau	**02-19-1993**	**06-04-2013 (05-21)**	**A**

SUBJECT: **PERSONNEL ACCOUNTABILITY**
APPLICABILITY: **All Operational Personnel**

POLICY

This General Order shall establish a system to efficiently account for personnel responding to and operating on the scene of an emergency incident. The personnel accountability system gives incident commanders a fast and efficient means to account for all fire and rescue personnel responding to or on the scene of an emergency.

DEFINITIONS

1. Personnel Accountability Tag (PAT) - The PAT shall consist of a snap fastener with a personnel identification card attached (Attachment #1). Every member of the Howard County Department of Rescue Services shall be issued a PAT. Each member shall keep their PAT attached to an existing "D" ring on their turn out coat when not assigned to a response unit. When an individual has been assigned by a unit Supervisor to a position on a response unit, the unit Supervisor shall place the PAT on the collector ring located in the cab of the assigned unit.

2. Collector Ring - The collector ring shall consist of a large ring with a unit identification tag. The collector ring shall be kept in the cab of each unit and shall be removable. Each emergency vehicle, except automobiles; SUV's and utility vehicles, shall be equipped with a collector ring.

3. Accountability Control Board - Used to keep track of the current status of all companies and personnel assigned.

4. Hazard Zone – A Hazard Zone is any area or zone where there is a known or potential risk to the safety of operating personnel, including but not limited to environments that are Immediately Dangerous to Life and Health (IDLH), potential collapse zones, and areas at risk for rapid change in their safety profile.

5. Command Assignment Chart – Used in Command Posts to track companies and units operating on the incident.

6. Personnel Accountability Report (PAR) – An organized reporting activity designed to provide positive confirmation of the location, assignment, and number of personnel assigned to a division, group, or unit operating within a hazard zone. Being "PAR" signifies that *all personnel assigned to that division, group, or unit operating in the hazard zone have been identified, positively located, and are accounted for*. Example: "Engine 61 to Command, Engine 61 is PAR."

7. Level I Accountability – The minimum level of accountability to be used at all incidents. All supervisors shall maintain a constant awareness of the position and function of all personnel assigned to operate under their supervision. This awareness shall serve as the basic means of accountability that shall be required for operational safety. The incident commander shall maintain an awareness of the location and function of all companies and sections. Division and group officers shall directly supervise and account for the companies operating under their supervision. Company officers shall maintain an ongoing awareness of the location and condition of all company members. Where assigned as a company, personnel shall be responsible to remain under the supervision of their assigned company officer.

8. Level II Accountability – A level of accountability activated when conditions in any Hazard Zone exist or may develop that pose a potential danger to operational personnel where an Accountability Manager gathers and organizes unit PAT tag collector rings and assures PAR report are conducted at a minimum of 15 minute intervals.

9. Level III Accountability – A level of accountability activated by the IC that requires point of entry accountability by a Division officer and typically an aide, where accountability, air management, and work-rest cycles are managed and documented.

PROCEDURES

10. Every division, group, and unit supervisor is responsible to account for all personnel under their command at all times. Each Unit supervisor shall report the unit's staffing level when responding, as outlined in the Communications General Order 410.01.

11. Emergency dispatchers at Howard County's Public Safety Answering Point (Howard Communications) shall monitor and record the number of personnel responding to an incident. After all units have reported responding for the initial alarm and each subsequent alarm, Howard Communications shall transmit the total staffing level for responding units to the Incident Commander (IC) as outlined in the Communications General Order.

12. To ensure the safety of operational personnel, beginning from the time of first unit arrival and ending once the IC transmits the "fire out" benchmark, Howard Communications shall transmit a single extended alert tone and announce the duration of the incident at fifteen (15) minute intervals notifying the IC the duration of the incident. Example: (SINGLE ALERT TONE SOUNDED) – *"Howard" to Smith Road Command - duration of your incident is now fifteen (15) minutes"*

13. As soon as possible upon receipt of the fifteen (15) minute duration reminder, the IC (or the Accountability Manager if Level II or III accountability is implemented) shall direct division, group, and unit supervisors operating within the Hazard Zone to provide a PAR report for personnel under their command to the IC or designated supervisor.

14. When all personnel are accounted for, division, group, and unit supervisors shall respond accordingly. Example: *"Division Alpha to Command – all personnel are accounted for"*.

15. If any member cannot be accounted for, division, group, and unit supervisors shall report their status as "missing". An immediate physical search shall be initiated along with an attempt to contact via radio. If radio contact is unsuccessful, a MAYDAY shall be declared in accordance with General Order 300.04. Example: *"Division Alpha to Command – Firefighter Smith is missing – he was last seen on the first floor, quadrant B. Search procedures have been initiated"*.

LEVEL I ACCOUNTABILITY

16. When responding to an incident, unit supervisors shall ensure the number of PATs on the collector ring and names match those personnel responding on the unit. The collector ring shall remain in the cab of the unit unless Level II Accountability has been announced by the IC.

17. Any member responding to the scene other than on dispatched apparatus must:
    - Report to the IC and identify yourself on arrival.
    - Await assignment from the IC.
    - Place your PAT on the assigned unit collector ring.

PAT tags and Unit Collector Ring

18. Company supervisors are responsible to know the exact number of personnel under their command. Division and group supervisor are responsible to know the exact number and identification of the units / crews operating under their command.

LEVEL II ACCOUNTABILITY

19. Level II accountability shall be activated when conditions in any Hazard Zone exist or may develop that pose a potential danger to operational personnel. This may include the danger of becoming lost or disoriented due to building configuration or an IDLH, collapse potential, extreme fire behavior, or when operating during overland search or wildfires over large areas.

20. When Level II Accountability is announced by the IC, an Accountability Manager shall be designated. The Accountability Manager shall report to Command and is responsible for:

- Gathering the collector rings.
- Organizing and arranging the collector rings on the Accountability Control Board at a designated location near the Command Post.

Personnel Accountability Control Board

- Verifying the total number of operational personnel assigned to the incident matches the number of collected PATs.
- Utilizing additional Accountability Managers and locations as necessary due to the geographic nature of the incident.
- At fifteen (15) minute intervals (and following changes in overall incident strategy), the Accountability Manager shall provide an IC PAR Status Report to the IC for all units operating in the hazard zone. A new PAR report shall be obtained for any unit operating in the hazard zone that has not transmitted their PAR status within the previous two minutes of this interval, or for any units operating in extreme IDLH environments. The IC PAR Status report shall include:

- The PAR status and number of operational personnel assigned in the complete hazard zone.
- The PAR status and number of operational personnel assigned in the hazard zone, by division and group.
- Confirmation of continuity between collected PATs and operational personnel numbers obtained through unit PAR reports for units in the hazard zone.
- The names of any division or group supervisors operating position is *within* an IDLH environment.
- The names of any units currently operating in *extreme* IDLH environments.
- Once accomplished, the IC shall transmit that "All units and personnel operating in the hazard zone have been accounted for."

21. Both the "Personnel Accountability Control Board" and the "Command Assignment Chart" shall be used in the process of determining PAR status for operational units within the hazard zone.

22. It shall be the responsibility of each unit supervisor to ensure that their units PAT's are removed from the Accountability Control Board before leaving the incident scene.

23. It shall be the responsibility of each vehicle operator to ensure that the collector ring is returned to the cab of the unit before leaving the incident scene.

LEVEL III ACCOUNTABILITY (POINT OF ENTRY)

24. When the IC determines that the incident requires more stringent accountability, he/she shall implement "Point of Entry" accountability. During "Point of Entry" accountability, the following responsibilities and assignments shall occur:

- The Accountability Manager shall continue to assist Command with tracking the accountability status reports as provided by division and group supervisors.

- Designated division or group supervisors shall be assigned to *every point of entry*, and they shall actively monitor the points or points of entry into the structure, confined space, or areas involved. All personnel operating in the Hazard Zone shall be assigned to a division or group supervisor. Given adequate resources exist, Command shall assign an Assistant Accountability Manager to each of the division or group supervisors responsible for "point of entry control" to help oversee the documentation of operational activities.

- As part of "Point of Entry" accountability, air supply monitoring and work period monitoring should likewise be implemented. Division or group supervisor(s) managing "Point of Entry" accountability shall ensure that each member's name, company number, duration of air supply, time of entry, and assignment is recorded on an Entry Control chart. PAT tags for personnel assigned to units under their supervision will be kept on a Personnel Accountability Control Board for the division. Division or group supervisors for points of entry shall also assure that adequate resources are requested to provide immediate relief to operating crews as appropriate for the Hazard Zone environment.

- As personnel exit a control point, the time of exit shall be recorded. Personnel who must exit at a point remote from the control point shall inform their division or group supervisor that they have exited from a remote location of the building. If any individual cannot be accounted for, the division or group supervisor shall report their status to the Incident Safety Officer as "missing", and that should be immediately relayed to the IC. An immediate physical search shall be initiated along with an attempt to contact via radio. If radio contact is unsuccessful, a MAYDAY shall be declared in accordance with General Order 300.04. Example: *"Division Alpha to Command – Firefighter Smith is missing. He was last seen on the first floor, quadrant B. Search procedures have been initiated".*

- The Accountability Manager shall provide an IC PAR Status report to the IC at fifteen (15) minute intervals and following changes in overall incident strategy or significant incident events for operational personnel assigned in the hazard zone.

COMPLIANCE

25. The PAT shall be considered an issued item of personal protective equipment. If a PAT is lost or misplaced, a replacement shall be obtained as soon as possible from the Bureau of Logistics. Each individual's PAT shall be inspected when the individual's personal protective clothing is inspected.

26. The mechanism to quickly account for personnel must be available to the IC at any point during an incident. In order to ensure the effectiveness of this system and the subsequent safety of all personnel, accountability procedures shall be strictly adhered to at all times. If an individual arrives at the scene without a PAT, their Fire Department ID card may be used as a substitute PAT.

REFERENCES

General Order 300.04 Mayday
General Order 300.07 Incident Command System
General Order 300.11 Rapid Intervention Crew
General Order 310.01 Single Family and Townhouse Structure Fire Operational Guidelines
General Order 410.01 Communications

FORMS/ATTACHMENTS

Attachment A: Entry Control Chart (Example)

Approved:

John S. Butler

John S. Butler
Deputy Fire Chief

Emergency Services Bureau

Entry Control Chart

v2013-05-07

UNIT	NAME	AIR TIMES			CYL	AIR PSI		UPON EXIT		
		ON	5 MIN WARNING	OFF	TYPE	IN	OUT	ReHab	ReCyc	

General Order 300.04: MAYDAY Situations

DEPARTMENT OF FIRE AND RESCUE SERVICES

GENERAL ORDER
300.04

Originating From	Issue Date	Revision Date	Attachments
Emergency Services Bureau	05-20-1995	06-04-2013 (05-21)	N/A

SUBJECT: MAYDAY Situations
APPLICABILITY: All Operational Personnel

POLICY

This General Order shall establish procedures to be used when an imminent life-threatening situation exists.

DEFINITIONS

1. MAYDAY – a term used to alert the Incident Commander (IC) and other individuals that operating personnel are in a life-threatening situation.

2. Emergency Tone – an informational tone broadcast transmitted by emergency dispatchers at Howard County's Public Safety Answering Point (Howard Communications) for a period of five (5) seconds over all operational radio channels to notify personnel that an emergency has been declared.

3. Channel Marker – A single beep tone that is used once the emergency tone has been activated. This tone will ensure that all personnel utilizing the channel understand that units are operating with an emergency on the fire ground and that transmissions should be limited.

4. Personnel Accountability Report (PAR) – An organized reporting activity designed to provide positive confirmation of the location, assignment, and number of personnel assigned to a division, group, or unit operating within a hazard zone. Being "PAR" signifies that *all personnel assigned to that division, group, or unit operating in the hazard zone have been identified, positively located, and are accounted for*. Example: "Engine 61 to Command, Engine 61 is PAR."

5. Initial Rapid Intervention Crew (IRIC) – a team of at least two (2) qualified personnel who observe the initial entry team entering the IDLH atmosphere and are available, trained and equipped with full protective clothing and Self-Contained Breathing Apparatus (SCBA) for immediate response to rescue the initial entry team. One (1) of these members must maintain contact with the initial entry team either visually and/or by voice or radio contact. The team can include the IC that is operating in the Tactical Command mode. At least two members of this team must be equipped with a radio, and all members should have a radio if possible.

6. Rapid Intervention Crew (RIC) – a crew specifically designated by the IC at the scene of an emergency beyond the initial stages, consisting of a minimum of four (4) qualified personnel, one being the RIC Supervisor. The RIC shall be available for the rescue of firefighters should the need arise. Depending on the size and complexity of the incident, the IC may establish one or more RICs. The RIC replaces or enhances the IRIC that is required during the initial phases of the incident. The RIC should be further reinforced with a Special Service company in order to provide the most effective number of personnel and compliment of tools for a potential rescue.

PROCEDURES

DECLARING A MAYDAY

7. When personnel operating on the scene of an emergency incident find themselves in a life threatening situation and require immediate assistance, they shall immediately declare a MAYDAY.

8. Declaration of a MAYDAY shall be limited to those situations that demand immediate action by on scene resources to come to the aid of a distressed member.

9. The conditions under which a fire fighter should call for assistance can include (but are not limited to) one in which the fire fighter has done the following:
    - Become tangled, pinned, or struck and cannot extricate self in 60 seconds
    - Falling through a roof or floor
    - Been caught in a "flash over
    - Been in an area with zero visibility, had no contact with a hose or lifeline, and did not know the direction to an exit
    - Had the primary exit blocked by fire or collapse and had not been able to locate a secondary exit within 30 seconds
    - Experienced a low air alarm activation and was not at an exit (door or window) within 30 seconds
    - Experienced a failure of an Self Contained Breathing Apparatus (SCBA)
    - Been unable to locate an exit (door or window) within 60 seconds
    - Serious medical emergency

10. Personnel equipped with a radio shall declare a MAYDAY by transmitting a verbal message over the fireground channel.

11. Personnel transmitting a MAYDAY shall activate the radio Emergency Identifier button located on top of the portable radio to ensure the MAYDAY is acknowledged.

- Personnel activating the Emergency Identifier shall provide the verbal LUNAR message listed below and receive acknowledgement from the IC or Howard Communications that your MAYDAY has been received.

12. The message shall begin with "MAYDAY, MAYDAY, MAYDAY" immediately followed by:
    - WHO- is calling the MAYDAY
    - WHAT – is the problem
    - WHERE – is the location of the MAYDAY

13. The acronym LUNAR shall be used to guide personnel in providing important information:
    - **L**ocation (last known location including floor number, quadrant, etc.)
    - **U**nit (identification of the crew and their unit assignment)
    - **N**ame (name of the individuals that need rescue or recovery)
    - **A**ssignment/**A**ir (the last known assignment and amount of air left in the cylinder)
    - **R**esources needed (what equipment is needed to implement the rescue plan)

14. When personnel not equipped with a radio, or with a non-functioning radio, find themselves in a MAYDAY situation they must notify any individual in the vicinity of the situation.

15. The Personal Alert Safety System (PASS) device shall be activated to alert personnel within hearing range that an emergency situation exists.

16. Should a PASS device activation be heard by other operating personnel, the location shall be broadcast and an attempt to establish contact with that individual shall be made, either physically or by radio. If contact is not made, and there is still a PASS activation, a MAYDAY shall be declared and resources will be assigned to locate the activated device.

17. Once a firefighter has declared a MAYDAY, the firefighter shall preface all radio transmissions with "MAYDAY (firefighter name) to Command". This will ensure all personnel are aware of who is making the transmission.

18. When declaring a MAYDAY for another firefighter, the name of that firefighter shall be used to avoid confusion as to who is in trouble.

FIREFIGHTER ACTIONS WHILE WAITING FOR RESCUE

19. Personnel declaring a MAYDAY shall consider the following:
    - Do not remove your facepiece
    - Stay calm to help increase your breathing time
    - Activate your PASS device
    - Do not change radio channels

- Communicate directly with the RIC once deployed
- Be aware that it may be necessary to "silence" your PASS device while talking on the radio
- Orient yourself to the surroundings
- If trapped or disoriented as a crew, stay together
- **Attempt self extrication, if possible**
- Search for an exit - look for light
- Retreat to an area of safety
- Use your flashlight as a beacon device
- Attempt to make tapping noises using tools or other objects
- Attempt to follow a hose line / life line to safety
- Find your own way out if you are physically able
- Listen for crews and apparatus noise

PUBLIC SAFETY COMMUNICATIONS - ACTIONS AND RESPONSIBILITIES

20. The monitoring of fireground radio channels by the Howard Communications dispatcher is an essential component of firefighter safety. Any time a Howard Communications dispatcher recognizes that an emergency situation exists, they are to immediately notify the IC.

21. At the request of the IC, the Howard Communications dispatcher shall activate the emergency tone on all channels in the zone via the announcement group and notify units on the incident that a *"MAYDAY has been transmitted and standby for a message from the IC".*
    - All units operating on the incident shall be notified by Howard Communications to *"discontinue any further radio traffic unless an emergency exists".*

22. The channel marker will be activated on the priority channel to ensure all personnel understand an emergency has been declared on the fire ground.

23. In the event that a MAYDAY is transmitted and not acknowledged by the IC, Howard Communications dispatcher shall immediately notify the IC. In the event neither the IC nor Howard Communications acknowledges the MAYDAY, any member may notify the IC/ or Howard Communications of the MAYDAY call.

24. The primary fireground channel shall serve as the "priority" channel for units operating as part of MAYDAY operations. The RIC and IC will remain on the "priority" channel.

25. The Howard Communications shall provide an additional dispatcher for fireground operations and notify the IC when an additional channel is available.

- The IC will determine if an alternate channel will be utilized and determine which units will remain on the priority channel and those to be assigned to the alternate channel.

26. In the event a radio Emergency Identifier has been activated from the fireground, Howard Communications shall immediately notify the IC and provide any information pertaining to the Emergency Identifier activation.

27. At the conclusion of the MAYDAY event, the IC shall instruct Howard Communications to make an announcement on all radio channels that the MAYDAY has been terminated and fireground operations shall return to the original fireground channel.

INCIDENT COMMAND - ACTIONS AND RESPONSIBILITIES

28. Immediately acknowledge the individual calling upon receipt of a MAYDAY and determine the following information:
    - WHO- is calling the MAYDAY
    - WHAT – is the problem
    - WHERE – is the location

29. Repeat the information back to the individual calling the MAYDAY confirming that the MAYDAY has been received and the accuracy of the information provided.

30. Acknowledge the MAYDAY and request that the Emergency Tone be transmitted by Howard Communications as outlined in section 21. At the conclusion of the emergency tone the IC shall announce that a MAYDAY has been declared:
    - WHO- is calling the MAYDAY
    - WHAT – is the problem
    - WHERE – is the location

31. Deploy the RIC based upon an established action plan (WHO; WHAT; WHERE) and in accordance with General-Order 300.11. Appropriate deployment is generally considered to be to:
    - Reported location
    - Last known location
    - Most hazardous area first

32. Request additional resources as necessary, assuring adequate EMS resources are available for the potential number of victims and sufficient resources for continued suppression efforts.

33. Establish an additional (backup) RIC team.

34. Maintain and control all fireground communications.
    - Non-essential radio traffic is to cease
    - Personnel in distress shall not be expected to switch radio channels.
    - Assure continuous active monitoring of the radio channel on which the MAYDAY was transmitted. Assign a resource to accomplish this if necessary.
    - If the IC determines that MAYDAY communications would be improved, they shall request an additional fireground radio channel for non- MAYDAY operations, from PSCC. The IC must coordinate which units shall remain on the MAYDAY channel, and which units will switch to the added operational channel.
    - Face-to-face communications shall be utilized, if possible, within groups and divisions. Group supervisors may relay "important" information if necessary, but radio discipline should be maintained.

35. Expand the Incident Management System as appropriate. The functional management of hazard mitigation operations and MAYDAY operations shall be separated. The IC must quickly:
    - Decide if hazard mitigation operations should be moved to a different channel from MAYDAY operations and, if so, initiate the channel move with Howard Communications and incident crews.
    - Make clear assignments as to which crews have objectives for which operational area.
    - Assure command officers are assigned to manage both operational areas, the original hazard mitigation operations and the MAYDAY operations.
    - Assure that both functional areas have a qualified Safety Officer(s) assigned.
    - Assure that both functional areas have a RIC team(s) assigned.

36. Additional branches, divisions or groups shall be established as needed based upon the current and anticipated needs of the incident. Consideration may be given to the following:
    - EMS
    - Staging
    - PIO
    - CISD
    - Family/Survivors Support

37. The IC shall verify accountability for all units operating in the hazard zone as soon as possible. PAR reports should be conducted face-to-face if possible, and in accordance with GO 300.02 Accountability. If an alternate fireground channel has been assigned as a result of the MAYDAY, necessary PAR reports should be performed on that channel and NOT the active MAYDAY channel. Once accomplished, the IC shall transmit that "All units and personnel operating in the hazard zone have been accounted for."

38. The IC will conclude MAYDAY operations and return units to normal operations upon confirmation that a MAYDAY operation is completed and after a complete PAR has been conducted.

39. Once the MAYDAY event has been terminated, the IC shall reassesses incident priorities and makes adjustments to the incident action plan, as necessary. Adjustments to the incident action plan and the current operational mode shall be communicated to all branches, divisions, groups, and units.

UNIT SUPERVISORS - ACTIONS AND RESPONSIBILITIES

40. All supervisors operating on the scene of an emergency incident shall ensure that accountability is maintained at all times. Supervisors shall keep the IC aware of their location and any progress being made.
    - Company officers shall indicate that they are PAR when acknowledging radio transmissions from the IC and/or group or division supervisors when they are in direct physical/visual contact with all personnel for which they are responsible.

41. When a MAYDAY has been declared, all supervisors must adhere to operational discipline and keep assigned personnel and units under control. Supervisors must not permit freelancing into the area of the rescue effort.

42. All operating personnel shall listen closely to Howard Communications and be prepared to change to an alternate fireground channel when directed to do so.
    - Supervisors shall ensure that all assigned personnel and units have changed to the alternate fireground channel.

43. All officers operating in the hazard zone shall immediately account for all assigned personnel. This shall be accomplished by face-to-face communications if possible, leaving the alternate radio frequency clear for emergency traffic.
    - If personnel are not accounted for, the IC shall be notified immediately.
    - Confirmation of accountability for assigned personnel shall be provided to the IC when requested.

44. Only crews specifically assigned by the IC or those who are in direct physical contact with the firefighter declaring the MAYDAY may engage in any rescue effort. The IC shall be notified of your location and any resources necessary to assist the RIC.

45. Supervisors shall ensure that all operational assignments continue to be carried out and maintained as directed by the IC.

46. RIC supervisors shall ensure that any RIC operation authorized and directed by the IC is performed in a coordinated manner.

OPERATING PERSONNEL - ACTIONS AND RESPONSIBLITIES

47. All personnel operating on the scene of an emergency incident shall ensure that accountability is maintained at all times. Personnel shall keep their supervisor aware of their location and any progress being made.

48. When a MAYDAY has been declared each individual shall immediately report to their assigned supervisor for accountability. This shall be accomplished by face-to-face contact when-ever possible, leaving the radio frequency clear for emergency traffic.

49. If an individual's supervisor is unaccounted for, the IC shall be notified immediately.

50. Operating personnel shall listen closely to the IC and Howard Communications and be prepared to change to an alternate fireground channel when directed to do so.

REFERENCES

General Order 300.02 Accountability
General Order 300.07 Incident Command System
General Order 300.11 Rapid Intervention Crew
General Order 310.01 Single Family and Townhouse Structure Fire Operational Guidelines
General Order 410.01 Communications

FORMS/ATTACHMENTS

None

Approved:

John S. Butler

John S. Butler
Deputy Fire Chief

General Order 300.07: Incident Command System

Howard County Department of Fire and Rescue Services

GENERAL ORDER

GENERAL ORDER 300.07

Incident Command System

EMERGENCY SERVICES BUREAU

Issue Date: September 21, 2005
Revision Date: November 01, 2016

APPLICABILITY

All career, volunteer, and contingent operational personnel

POLICY

An emergency incident presents a complicated and rapidly changing situation. Effective command organization will serve to create effective operations, proficient communications, and maximum accountability and safety for all personnel operating in Hazard Zones and within areas that pose Immediate Danger to Life and Health (IDLH).

Howard County Department of Fire and Rescue Services (Department) shall adopt the National Incident Management System (NIMS) model as outlined and described in the United States Fire Administration/National Fire Academy *Field Operations Guide* (Document ICS 420-1, July 2016), accessible at http://www.usfa.fema.gov/downloads/pdf/publications/field_operations_guide.pdf.

This policy shall outline further local applications and procedures of the Incident Command System to help guide the Incident Commander (IC), designated Division and Group (D-G) supervisors, and other personnel operating within the incident command structure.

DEFINTIONS

- **Accountability** is a set of tasks accomplished by a designated individual that include gathering Unit Collector Rings and Personal Accountability Tags, organizing them on the Accountability Control Board, verifying the number of personnel assigned to each resource, utilizing additional Accountability Managers as necessary, and obtaining PAR status from units as required for a PAR status report to Command at fifteen (15) minute intervals during an incident.

- An **Accountability Control Board** is used to keep track of the current status of all companies and personnel assigned, reference General Order 300.02: Personnel Accountability.

- The **Channel Marker** is a single beep tone that is used once the emergency tone has been activated. This tone will ensure that all personnel utilizing the channel understand that units are operating with an emergency on the fire ground and that transmissions should be limited.

- **Command** is the act of directing, ordering, and/or controlling resources by virtue of explicit legal, agency, or delegated authority.

- The **Command Aide** is a person assigned to assist the IC in the Command Post with documenting resources on a tactical worksheet, monitoring tactical radio channels, and other critical functions of command. The Command Aide may have other assigned duties as directed by Command, but under normal circumstances, the Command Aide should NOT be assigned to tactical or company-task level assignments during emergency incidents. The paramount goal of this resource is to increase the effectiveness of Command.

- A **Command Post Operator** is an optional role within the Strategic Command Team that is assigned to operating the command post and equipment therein.

- A **Command Support Officer** is an optional role within the Strategic Command Team that can support Command by coordinating resources and providing assistance with communication and documentation.

- The **Command Transition Report** is transmitted by the arriving chief or command officer that officially transfers command from an initial IC that had been operating in the Tactical Command mode to the arriving chief or strategic command officer.

- The **Emergency Tone** is an informational tone broadcast transmitted by emergency dispatchers at Howard County's Public Safety Answering Point (Howard Communications) for a period of five (5) seconds over all operational radio channels to notify personnel that an emergency has been declared.

- **Emergency Traffic** is the declaration transmitted over a radio channel when the sender has an urgent message. The phrase is to be recognized and respected by other personnel on the scene so as to give the sender's message absolute priority, and to limit all non-essential radio traffic until the urgent situation is resolved. Any operating personnel can declare Emergency Traffic and the *Emergency Traffic Channel Marker* tone in order to communicate with priority status. In order to facilitate the restriction of all non-essential radio traffic, Howard Communications shall broadcast a repeating *Emergency Traffic Channel Marker* tone for as long as the Emergency Traffic restriction is lifted by Command.

- The **Follow-Up (Basement) Report** is a structured report given following the Initial Radio Report that includes results of a 360 degree assessment, identifying the basement type of the structure, and reconfirms the overall incident strategy and location of accountability tag collection.

- A **Hazard Zone** is any area or zone where there is a known or potential risk to the safety of operating personnel, including but not limited to environments that are IDLH, potential collapse zones, and areas at risk for rapid change in their safety profile. An atmosphere that is IDLH poses an immediate threat to life, would cause irreversible adverse health effects, or impair an individual's ability to escape from a dangerous atmosphere.

- The Department's general **Incident Risk Management Plan** provides a framework for defining the level of acceptable risk given certain sets of circumstances. That plan translates into a clearly communicated overall incident strategy, either "offensive" or "defensive."

- An **Incident Tactical Worksheet** is a type of Command assignment chart that is typically used when in the strategic mode of command within a command post. Command uses this worksheet to visually track the ICS structure for the incident, units operating on the incident and their assigned tasks, and incident features such as occupancy layout and access.

- The **Initial Radio Report** is a highly structured radio report that is transmitted by the first arriving officer following their size-up of the incident critical factors. It officially establishes Command for an incident, as well as establishing the incident's overall strategy.

- A **Known Life Hazard** is a circumstance where responding personnel hear, see, or learn from a reliable source that a person is in or near an IDLH atmosphere and in immediate life-threatening danger. The information may be obtained by direct observation, from emergency dispatchers at Howard Communications, or from bystanders. Often, a risk-benefit decision must be made based on the reliability of the information and other factors. Operational risk should only be significantly elevated in circumstances where the life hazard is reliably known.

- If directed to **Level One Staging**, all companies except the first arriving engine and first arriving truck shall stage prior to arrival at the scene, nearby (within a block if possible) but in an uncommitted position that still allows access into the incident scene. Once staged, units shall be prepared to assume tasks as they are assigned by Command. Engine companies should not stage past their last water source. Units arriving at their Level One staging positions shall transmit notification of their arrival to a Level One staging position to Command. Unit personnel will remain on the apparatus and monitor the assigned incident radio channel.

- Command may establish a **Level Two Staging** area for arriving resources. When this occurs, arriving resources will then assemble at a centralized Level Two Staging area designated by Command that is adjacent to the incident. The area should be close enough to the incident scene to provide timely access, but located out of the way and not exposed to the incident's hazards.

- **MAYDAY** is a term used to alert the IC and other individuals that operating personnel are in a life-threatening situation.

- There are three distinct **Modes of Command**, the Investigation mode, the Tactical mode, and the Strategic mode. Each implies that Command is operating under different circumstances and in differing environments. Depending on which mode is declared, expectations of command capacity are adjusted.

- **NIMS** refers to the National Incident Management System and the defined positions and terminology for incident management and command structure.

- **On-Deck** is a typical unit (or crew) assignment where that unit is to be next in line and prepared to work (Dictionary.com, n.d.). Usually the unit is placed in a forward position located just outside the immediate Hazard Zone and safely distanced from the entrance of a tactical position where they can be easily used to quickly relieve another unit that has completed their work cycle in the Hazard Zone, to reinforce a deployment of the designated Rapid Intervention Crew, or to reinforce crews

operating within the Hazard Zone. Their readiness and immediate availability is critical to being able to provide quick relief and facilitating an effective air management strategy for interior crews. Leaders of on-deck units will report to their assigned supervisor, typically a D-G supervisor or directly to Command. Once assigned to the position of on-deck, crews shall remain on-deck until given another assignment by their designated supervisor.

- A **Personnel Accountability Report (PAR)** is an organized reporting activity designed to provide positive confirmation of the location, assignment, and number of personnel assigned to a division, group, or unit operating within a hazard zone. Being "PAR" signifies that *all personnel assigned to that division, group, or unit that are operating in the hazard zone have been identified, positively located, and are accounted for*. Example: *"Engine 61 to Command, Engine 61 is PAR with 4."*

- Once leaving a Hazard Zone after completing a work cycle, crews may be directed to **Recycle**, or make themselves ready for reuse (Merriam-Webster's online dictionary, n.d.), and reassignment into the Hazard Zone. This is typical when it is determined by Command that conditions do not dictate the need for extended periods of rest or shelter in between work cycles or rehabilitation at a formal **Rehabilitation Area**, Division, or at the Medical Unit. When Recycling, crews usually remain assigned to their working supervisor, replace their air cylinders, and when ready the Crew Leader lets their supervisor know they are ready for re-assignment. The length of the work-rest cycle, as well as the need for formal rehabilitation, is set by Command for each incident based on work conditions, environmental conditions, and policy.

- A **Rehabilitation Area** or Division may be established by Command when on-going fire and rescue operations have the potential to significantly affect the physiological condition of emergency personnel. Command may designate a **Medical Unit Leader** who is responsible for development of the Medical Plan (ICS form 206), which includes responder rehabilitation and responder medical care, and supervision of those resources. On large incidents, the Medical Unit Leader may be assigned within the Service Branch of the Logistics Section. Formal rehabilitation cycles may be accomplished within the Medical Unit.

- **Safety Red Flags** are conditions that must "jump out" at personnel and trigger an increased awareness and appreciation of increased risk. A Safety Red Flag will not necessarily change the overall incident strategy or incident action plan, but it must be identified and addressed by Command and the Hazard Zone management team. Examples include fire in a basement, crews operating over a fire, and crews operating in zero visibility.

- A **Senior Advisor** is an optional role within the Strategic Command Team that is designed to provide quality assurance and assist the IC by providing a senior perspective on the effectiveness and appropriateness of incident strategy and organization.

- A **Single Family**, or "detached," is defined as a structure that is usually occupied by one household or family; has only outside walls, does not share an inside wall and does not touch any other dwelling.

- The **Strategic Command Post** is a designated vehicle or place from which the IC and Command Team manage the functions of command with various support elements in place.

- The initial **Strategic Command Team** is, at a minimum, comprised of 1) an IC functioning in the Strategic Command Mode and 2) a dedicated officer or technician whose primary function is to enhance the effectiveness of incident management through technical support of the IC (a Command Aide). The team can be expanded as is required to support the command functions required by the incident. Further expansion of the Strategic Command Team could include the addition of a Senior Advisor and a Command Support Officer, who would actively communicate with a Level Two Staging Manager and manage the assignment of additional Command Team NIMS positions and command post needs as is appropriate.

- An IC functioning in the **Strategic Command Mode** is typically a chief or command level officer that is commanding from *outside of the tactical environment, and within an environment that facilitates and enhances managing the functions of Command*. A stationary Command Post has been established, in which the IC and their Command Aide (and possibly others) are actively managing an Incident Tactical Worksheet, recording the position and function of all assigned resources, assuring the Incident Action Plan (IAP) aligns with the critical incident factors, and monitoring radio transmissions closely in a noise and distraction-free environment, preferably using a headset. Command functions include, but are not limited to: confirming the overall incident strategy, confirming and continuing to formulate an IAP, regular assessment of the presenting critical incident factors, establishing objectives based on the incident's critical factors, evaluating the need for additional resources, directing and assigning responding resources, and coordinating activities necessary for overall operational control.

- An IC functioning in the **Tactical Command Mode** is typically a company officer that is *performing all the responsibilities of Command while on-foot and from within the tactical environment*. They are maintaining an exterior position near the Hazard Zone, and are NOT committed within an IDLH or potentially rapidly evolving atmosphere. Command functions include, but are not limited to: declaring the overall incident strategy, formulating an IAP that aligns with the identified critical incident factors, establishing objectives based on the incident's critical factors, evaluating the need for additional resources, directing and assigning responding resources as they arrive. They are typically functioning while in turnout gear in a loud and distracting environment, initiating and monitoring incident communications using a portable radio, functioning without a Command Aide, and not managing a Command Assignment Sheet (tactical worksheet). A transition to the **Strategic Command Mode** is anticipated upon arrival of a chief or command officer.

- A **Townhouse** is defined as a house attached to any number of other townhouses (three or more), each of which may have multiple floors, commonly side by side each with their own separate entrances.

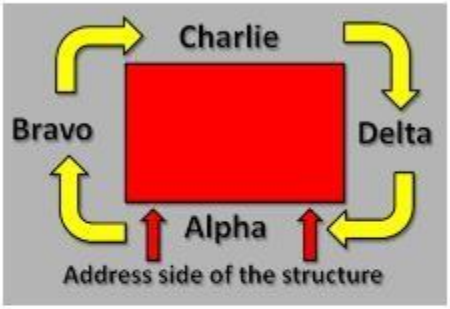
- **Tactical Ventilation** occurs as a result of specific, coordinated tactical actions that are calculated to accomplish an *intended* objective relating to ventilation of a structure. Non-Tactical Ventilation is *unintentional* ventilation of a structure that results from other activities that are taking place on the fire ground, such as making access to a structure through a door or window, advancing a hose line

into a structure, or creating a means of egress by removal of a window. Recent research has shown that unintentional Non-Tactical Ventilation can have unanticipated, rapid, and significant impact to fire intensity and spread, and has been attributed as a factor in several firefighter fatalities regionally and nationally.

PROCEDURES

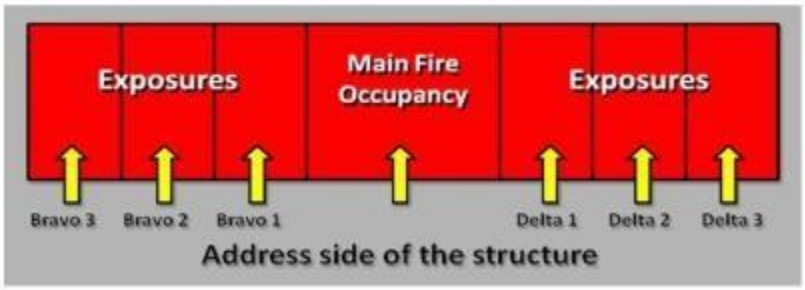
Structure and Geographic References:

Reference to the structure's exterior sides:



- Side Alpha shall be the side of the building that is utilized as the building address. In most cases, this would be the side that includes the main entrance or foyer. In those situations where the building location or configuration is unusual, the officer shall designate the sides of the building using a landmark (e.g., parking lot, swimming pool, etc.)
- When it is necessary, place a unit on the corner of a building to maintain clarity, denote the corner by using the intersection of the two building sides (e.g., "Truck 7, set up on the Bravo/Charlie corner.").

Reference to the structure's exposures:



Reference to the structure's size:
The size of the structure shall be defined by the overall size of structure, not by occupancy type.

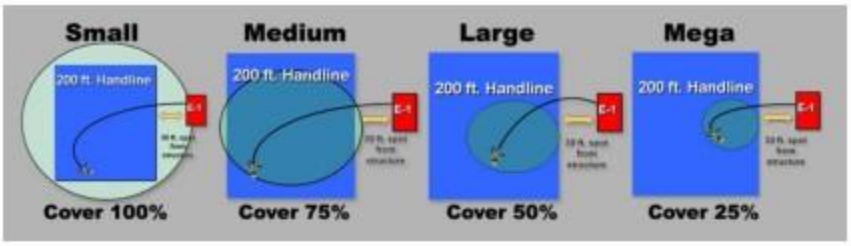
Descriptions of structure size can often be ambiguous. For example, one might call a 4500 square foot home "large," because compared to what might be considered an average sized home (2500 square feet), it seems large when looking at it in the context of a single family residence, the occupancy type. But, if that same 4,500 square foot occupancy was a strip mall, one would likely consider it to be a "small" strip mall. But, operationally, they present similar challenges.

In order to minimize ambiguity, **the description of structure size shall be based on how it relates to the areas that can be covered with a typical 200 foot hose line**, and on the maximum depths into the structure at which safe operations can take place.

- Small - A 200 foot line can access 100% of the fire area/occupancy. This applies to all occupancy types, houses to warehouses.
    - Usually up to about 30'x75' or 50'x50'
- Medium - A 200 foot line can access plus or minus 75% of the fire area/occupancy.
    - Usually up to about 100'x100'
- Large - A 200 foot line can access plus or minus 50% of the fire area/occupancy.
    - Usually up to about 200' x 200' feet per level (e.g. 40,000 square feet)
- Mega - A 200 foot line can access significantly less than 50% of the fire area/occupancy, often 25% or less.
    - Larger than 200'x200'

Using this structure description method will provide more consistent classification of structure size, basing it around a core operational task, hose line access. Note that multiple levels to which access must be made from ground level might make a structure effectively larger, despite the square footage per level (as in a garden style apartment).

This method will also link structure size descriptions to safe air management, as effective management of air reserves is directly related to the distances and depths to which personnel travel within the structure. Firefighters working in an IDLH atmosphere are totally dependent on the air that is brought with them into the Hazard Zone, and must maintain enough air reserve to effectively exit in the event of a sudden or unplanned event without dipping into their emergency reserve. In this way, this method of describing building size can improve safety by providing a direct association to building size with realistic working times of our SCBA, and influence how work-air cycles might be managed at an incident, particularly in larger, more dangerous structures.



Reference to the interior of a structure:

The interior of the buildings shall be divided into quadrants 1, 2, 3, and 4, starting at the left front of the building. The floor number shall be used to identify the level of the building (e.g., *"Engine 91, check floor number 4, quadrants 1 and 2."*).

Reference to multi-story structure interior floors:

- For purposes of radio reporting, basement and sub-level floors **SHALL BE INCLUDED** in the reference to a structure's total number of floors.
    - The term "including" shall be used when providing a radio report that refers to a basement level. For instance, "the structure appears to have a total of three stories INCLUDING a basement with lookout windows in the rear, two complete stories showing below the roof line in the rear." The basement level does not imply three stories PLUS a basement level.

- Floors above basements and sub-levels shall be referred to as "floor number …". Floors shall not automatically be referred to as "divisions." If Command establishes a supervisor for a given floor, activity on that floor may then occur under direction of that Division Supervisor, and that supervisor shall be referred to as "Division …". From that point forward, for floor number 4, "Division 4" would be the title of the supervisor who is supervising the activity on the floor.

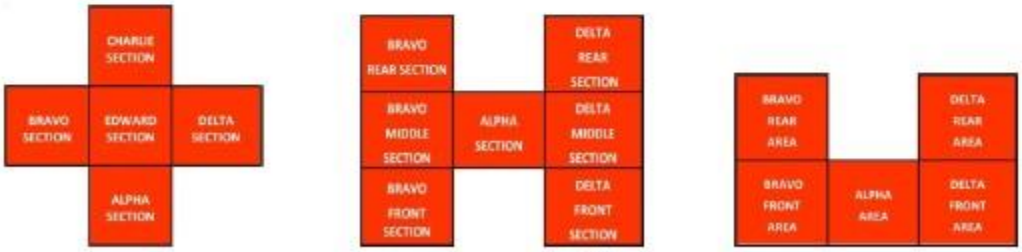
Reference to the structure's basement:

- Type
    - Walk-out
    - Walk-up
    - Note presence or absence of Look-Out Windows
    - Note presence or absence of Window Wells
        - If present, specify if a Window Well window enlarged for egress is present
    - Basement with no exterior openings
    - No basement

- Condition
    - Finished
    - Unfinished
    - Unable to determine

Reference to the interior of winged and irregular structures:

The wings of an irregular structure may be broken down into areas or sections by the officer in charge whenever this will facilitate operations. Whatever designations are implemented at irregular structures, Command must clearly declare them and all company and command officers must be advised of the section or area designations. Possible examples are:



Response and Communications:

Communicate in accordance with this General Order, *General Order 410.01 Communications*, and the response policy for the specific occupancy, if any.

The phonetic alphabet shall be used for radio communications, as the alphabetical letters are easily misunderstood over the radio. (Alpha, Bravo, Charlie, Delta, Echo, Foxtrot, Golf, Hotel, India, Juliet, Kilo, Lima, Mike, November, Oscar, Papa, Quebec, Romeo, Sierra, Tango, Uniform, Victor, Whiskey, X-ray, Yankee, Zulu).

An exceptionally high level of discipline will be required of all officers and operational personnel during structural firefighting operations. Failure to follow any portion of the Incident Action Plan (IAP),as defined by either general order or incident command, can lead to a breakdown of the entire operation and could have significant life-safety and other consequences.

Units responding shall indicate "responding with [number of] personnel" to Howard. The transmission is to be made on the assigned operating channel.

Units not assigned an action by Command that are initiating actions as outlined in General Order Deployment Models shall report on scene and transmit their assumed position and function (e.g. *"Engine 71 is on location, side Alpha; we have Engine 91's hydrant; stretching a backup line from Engine 91"*). If assigned a task or action by Command they should transmit a confirmation of that order to assure complete understanding.

Only the company officer shall report to or communicate with the Command Post to receive an assignment. Units not assigned by established deployment models or those units who have not received orders from Command shall announce their arrival and stage as appropriate and await orders, gather information, and organize and brief assigned personnel.

Staff and chief officers responding to the incident shall report to the Command Post for assignment.

Agency representatives from assisting or cooperating agencies shall report to the Liaison Officer at the Command Post.

Establishing Command:

While companies are en route to an emergency, the highest ranking responding officer will make operational decisions related to the incident.

The Department shall establish an incident command structure for all incidents where two or more companies are actively engaged in operational tasks, and for incidents that present a potential or on-going Hazard Zone. The establishment of Command shall be designated by the transmission of an Initial Radio Report that identifies the unit establishing Command and the Mode of Command being assumed. Once Command is established, units that are en-route and on-scene shall coordinate and communicate any subsequent unit actions or observations through "Command."

If mutual aid units are first arriving, the first arriving Howard County Department officer will normally transition and assume command as the initial IC.

In certain special circumstances, the first arriving company officer may elect to **Pass Command**. This shall ONLY be permissible when:

- There is a **Known Life Hazard** (a known and immediate critical life threat), when the value of quick action by the company officer outweighs the value of establishing Command.
- A chief, command officer, or other company officer is arriving nearly simultaneously and takes Command.
- A Size-Up Report must still be transmitted by the officer that is passing command, but it may be abbreviated as appropriate. The report will reflect the actions of the first unit.
    - *"Engine 22 is on scene, side Alpha, of a small two-story wood frame townhouse. We have a working fire, fire showing from the second floor. Report of victim trapped on floor number one. We have checked the rear and the basement is clear. Lieutenant from Engine 22 is **passing command to the next arriving unit.** Engine 22 is initiating offensive operations, stretching a hose line to the first floor from side alpha for search and rescue and fire control."*

- In such cases, the officer of the next arriving company MUST establish Command.
- Use of an Initial RIC team shall be in compliance with General Order 300.11: Rapid Intervention and IDLH Initial Entry Teams.
- It is imperative that all firefighters operating within any Hazard Zone always operate in teams of two or more, maintain constant communication with each team member through visual, audible, physical, or safety device, and maintain close proximity to each other to provide assistance in case of any emergency.

Company officers (non-chief officers) that establish command shall include their rank in the transmission of the command statement.

- *"... Captain from E81 is establishing Bethany Lane Command ... "*

Modes of Command:

There are three **Modes of Command** that can be assumed: Investigation, Tactical Command, or Strategic Command.

- **Investigation Command Mode**
    - The Investigation Command Mode may be established when a first arriving company officer (or firefighter) cannot identify a Hazard Zone, but must investigate further.
    - The IC is in Command on-foot, mobile and investigating.
    - After arriving on scene and transmitting a Size-Up Report, the company officer might state
        - *"... Company is investigating. Lieutenant from E31 is in Command."*

- **Tactical Command Mode**
    - The Tactical Command Mode is an early Command mode that *may* precede the **Strategic Command Mode**, depending on which unit or level of officer arrives first.
    - The Tactical Command Mode may be established when a first arriving company officer (or firefighter) encounters a Hazard Zone and establishes initial Command in the absence of a

chief or command level officer. A transition to the Strategic Command Mode is anticipated upon arrival of a chief or command officer in an appropriate vehicle.

- The IC functioning in the Tactical Command Mode is typically a company officer that is *performing all the responsibilities of Command while on-foot and from within the tactical environment*. They maintain an exterior position near the Hazard Zone, and are NOT committed within an IDLH or potentially rapidly evolving atmosphere.
- Command functions include, but are not limited to: declaring the overall incident strategy, formulating an IAP that aligns with the identified critical incident factors, establishing objectives based on the incident's critical factors, evaluating the need for additional resources, directing and assigning responding resources as they arrive.
- The IC is typically functioning while in turnout gear in a loud and distracting environment, initiating and monitoring incident communications using a portable radio, functioning without a Command Aide, and not managing a tactical worksheet.
- It is particularly challenging to command from within the tactical environment and function simultaneously on all three organizational levels; strategic, tactical, and task. The IC is often in command of the incident while simultaneously directing initial tactical and task operations of the first arriving crews. Responding resources must take the environment of the IC into consideration. Managing command within these circumstances is not preferable for more than the initial stages of an incident. Based on incident conditions and chief or command officer response times, ICs functioning in the Tactical Command Mode must make the decision whether it may be more appropriate to function from a fixed position inside of a vehicle where the environment can be more focused and some **strategic command post** elements could be employed.
- It should be emphasized that the *role* of the IC functioning in the Tactical Command Mode still includes all Command responsibilities as outlined in the NIMS and organizational policies. These include declaring the overall incident strategy, establishing objectives based on the incident's critical factors, evaluating the need for additional resources, and directing and assigning responding resources. The difference for the IC functioning in the Tactical Command Mode is the conditions under which Command is typically being managed.

- **Strategic Command Mode**
  - The Strategic Command Mode requires a chief or command level officer to establish themselves as the IC and to manage command from *outside of the tactical environment, and within an environment that facilitates and enhances managing the functions of Command*.
  - There is generally a team in place to support managing the functions of Command.
  - The IC and support team are stationary, and are inside of a vehicle designated as the **Command Post**. Within the Command Post, the IC and their Command Aide (and possibly others) are actively managing a Command Assignment Sheet (tactical worksheet), recording the position and function of all assigned resources, assuring the IAP aligns with the critical incident factors, and monitoring radio transmissions closely in a noise and distraction-free environment, preferably using a headset. A Senior Advisor may be present advising and verifying that enough resources are assigned to the incident, that the overall incident strategy and IAP are current and in-line with forecasted incident conditions, confirming the incident organization chart matches the size and complexity of the incident, and managing

the Command Post. A Command Support Officer may also be present, assisting with communications, resource management, and documentation.

- Command functions include, but are not limited to, confirming the overall incident strategy, confirming and continuing to formulate an IAP that aligns with the identified critical incident factors, establishing objectives based on the incident's critical factors, evaluating the need for additional resources, directing and assigning responding resources, and coordinating activities necessary for overall operational control.

Command, whether operating from within a tactical environment or from within a Command Post, is tasked with developing an IAP and managing the resources assigned to mitigate the incident. The Incident Command System should be expanded anytime the incident officer feels that the limit of effective span of control has been reached, and the need for additional management exists.

On routine medical calls, it is typical that a company officer from a supporting unit that is on scene will assume the responsibilities of the IC (e.g., need for additional resources, notifications, etc.), while coordinating closely and effectively with the provider in charge of patient care and other EMS providers to meet the medical needs of the patient or patients.

If an Operations Section Chief is established for a given incident, that Operations Section Chief shall retain those responsibilities that are operational in nature which are attributed to the IC throughout this section of the document. Obviously, both Command and an established Operations Section Chief share in many incident responsibilities, such as providing effective oversight and providing for the safety of operating personnel.

Units on the scene can be considered as either *available* (ready for an assignment), *assigned* (performing and active function, or in transition from one location to another), or *out of service*.

Command should actively request and receive ongoing **Unit Status Reports** from the units (or their D-G supervisors) that have been assigned tasks in the Hazard Zone. When reporting status, units should report the *conditions* they have, the *actions* they have taken, and their *needs* for additional resources or actions of others, and end the report with their PAR status. Unit leaders, D-G supervisors, and all officers must proactively keep their respective supervisors advised on conditions in their area of responsibility, while respecting the need for brief, concise, and efficient radio communications. Officers shall provide their supervisor a Unit Status Report that outlines their conditions, action and needs in the following situations:

- Mayday
- Victim located
- Sudden change of events
- Unsafe condition identified
- Unable to complete assignment (e.g. obstacle identified, need additional resources)
- Changing crew location (moving from one apartment to another, etc.)
- Concealed space fire is not easily controlled
- Roof Report
- Assignment has been completed

A **Roof Report** is a concise status of roof conditions, and includes the type of roof, location of any fire breaks, an assessment of roof loads, an assessment of roof condition, and the presence of any fire or smoke. If the structure is of tilt-slab construction, roof reports should include an assessment of exterior walls for buckles and bows.

Command should assign D-G supervisors as needed to maintain an effective span of control. Supervisors operating within an IDLH atmosphere should supervise no more than two to three Units (the maximum of five should never be exceeded, and supervisors should strive to remain on the edge of the IDLH in these cases), while outside of the IDLH three to seven units is acceptable, with five being the optimal maximum. The expansion of the ICS structure is developed by Command as the situation dictates. Command will establish sections, branches, divisions, groups, and managers in order to allow for a safe and effective span of control when managing the incident objectives and overall strategy.

- When two or more companies are assigned to a function or area, Command must consider the need to establish a D-G supervisor (or branch director) to manage the assigned companies. The assigned D-G supervisor must not remain in a company officer position.
    - Whenever possible, these individuals should be selected from responding command officers, staff personnel or company officers not already deployed. Company officers used in these positions will assign an individual from their crew as the new Unit Leader, and that unit (if sufficiently staffed) would then be available for assignment. Once an individual is assigned to an ICS position, they assume the radio designation of the command position (e.g. alpha division, charlie division, roof division, rescue group, medical group, or extrication group).
        - If there are not enough personnel left in the crew to form an effective unit, Command may consider assigning those personnel to other crews.

- D-G supervisors must provide thorough oversight over those units and personnel assigned to them. This is usually most effectively done when given responsibility for a specific geographic area. Therefore, when possible, instituting *division* supervisors is preferable to instituting *group* supervisors.
- When possible, D-G supervisors should be positioned at a point of entry to the structure. Once assigned there, all units that enter the structure by way of a point where there is a supervisor assigned shall be assigned to that supervisor.
- D-G supervisors should remain exterior to the structure when at all possible.
    - When operating in an offensive strategy, officers must make a decision about where they will position themselves to perform their assigned role. In particular, assigned D-G supervisors should be positioned outside of the IDLH environment in a position where they can effectively communicate and manage the units assigned to them.
    - Their ability to clearly and effectively communicate is imperative. Therefore, they should not be in a location that requires them to wear breathing apparatus if at all possible.
    - There are infrequent situations where it can be beneficial from tactical standpoint for Command to allow D-G supervisors take a position within the IDLH. If a supervisor elects to position themselves within the IDLH atmosphere, Command must be informed of such immediately so that management tasks that are normally expected from D-G supervisors (such as assuring adequate and timely replacement resources, work-cycle time and rotation, are consumption awareness, etc.) can be accomplished by someone else.

        - The impact of assigned D-G supervisors operating within the IDLH can be very significant to the management of an incident. They are typically impaired or unable to effectively communicate (due to using breathing apparatus), unable to maintain the proper supervisor perspective (due to being in breathing apparatus and inside a hostile IDLH environment), and unable to completely manage their divisions or groups effectively. There is usually little benefit to this situation, as it reduces supervisors to a mere point of radio contact, and thus does not effectively support Command. The decision by a D-G supervisor to operate from a position within the IDLH should not be made lightly or without justification.

- D-G supervisors should assure that unit accountability, work-rest cycles, and breathing air cycles are being managed for companies assigned to them, including effective rotation of their crews and the **on-deck** resources when required to do so.
    - The D-G supervisor's oversight of the management of assigned unit's air supply in no way diminishes the individual member's responsibility to manage their own air supply, or the company officer's responsibility for managing his/her crew's air supply.
    - An effective rule of thumb for managing the work-rest cycle of a Hazard Zone unit is to contact that unit about two minutes before they have reached their estimated air safety margin and remind them they are getting close to their work cycle ending, and they will need to exit the Hazard Zone soon.
    - A D-G supervisor that is managing fire control operations initiated through side alpha access might consider the following resources for use in their division:
        - An engine and a truck company for active work
        - An engine and a truck company to be on-deck for relief
        - Two engine companies to fill-in during a recycle or rest cycle
        - Assure the division has coverage from an established RIC team should it become necessary
        - Consideration for an assigned Aide to assist the supervisor in documenting accountability, air consumption, and work-rest cycles
        - Consideration for a dedicated division safety officer
        - Consideration for a dedicated accountability manager (required for Level 3 Accountability)
            - Accountability must occur in compliance with *General Order 300.02 Accountability*

- Crews that are rotated out of a Hazard Zone can be either **recycled** or re-assigned to an established **rehabilitation area or division**, at the discretion of their D-G supervisor or Command. Company officers and D-G supervisors are responsible to monitor the welfare of their personnel at all times. Companies exiting the Hazard Zone shall perform a face-to-face with the D-G supervisor that shall include a report of the physical condition of their crew.
    - **Recycled** implies that the crew does not need time for rehabilitation and/or medical monitoring. Usually these recycle activities are limited to changing air cylinders and hydration of personnel. If the company is able to recycle, they will retain their assignment to the division or group. During Level 3 Accountability, the D-G supervisor shall retain the unit's PAT tags on their accountability board and note the company is recycling.

- If the company is sent to an established **medical unit** or **responder rehabilitation division**, they will be assigned to that division supervisor until they are released and ready to return to incident operations.
    - *"Division Charlie to Command, I'm sending Engine 22 to Rehab and I need another engine company to replace them."*

- Command officers must maintain an awareness of the condition of the personnel working under them. Personnel can rest between work cycles in any number of places on the scene, but formal rehabilitation processes that include protection from the elements, hydration, nourishment, and medical monitoring, should be proactively considered. Command must assess the current weather and environmental conditions when establishing their work-rest-rehabilitation plan, particularly when extreme conditions exist.
- Units that complete a rehabilitation cycle may become available for assignment in one of several ways, as implemented by Command. They may be reassigned by either the Medical Unit Leader or Responder Rehabilitation Manager (if instituted) to physically report to the Level Two Staging Area, they may be directed to stage at the rehabilitation area and contact the Staging Area Manager by radio to report their availability for assignment, or they may be directed to report their availability from the rehabilitation area by radio directly to Command.

The Initial Radio Report and Size-Up:

The first arriving officer or Unit Leader shall perform a size-up and establish command by transmitting an **Initial Radio Report** that includes a command statement for all incidents where two or more units are investigating an incident or are actively engaged in operational tasks. Once Command is established, units that are en-route and on-scene shall coordinate and communicate any subsequent unit actions or observations through "Command." The size-up should begin with an assessment of the incident's critical factors (See Appendix A).

The Initial Radio Report shall communicate their size-up, their determination of overall incident strategy, their IAP and establishes Command. Once Command is established, units that are en-route and on-scene shall coordinate and communicate any subsequent unit actions or observations through Command. The size-up should include an assessment of the incident's critical factors. The report should include:

- Unit ID and arrival to the scene
    - *"Engine 101 to Howard."*
    - *"Engine 101, go ahead."*
    - *"Engine 101 on location ..."*

- Structure and area description
    - Size of structure
    - Number of stories
    - Occupancy type
        - Single-family
        - Multi-family, Multi-family apartment
        - Strip mall

        - Large commercial
        - Big box, High rise
    - Arrangement
        - *"... of a medium sized multi-family garden style apartment, three stories, ..."*

- Problem description
    - Conditions (nothing showing, working fire, etc.)
    - Location/floor
    - Location/side
    - Apparent life-safety issues
    - Special circumstances
        - *"... with a working fire, smoke showing from the second floor side alpha ..."*

- Initial IAP and actions to be taken by first arriving unit
    - First arriving unit (e.g. Engine 1) location
    - Water supply
    - Task-location-objective
        - Task (Lay out from ..., stretch a line ..., etc.)
        - Location (... into side alpha, 3rd floor, etc.)
        - Objective (... for primary search, fire control, investigate, etc.)
        - *"Engine 101 has laid a supply line from the hydrant at the entrance to the cul-de-sac, and will be making a quick exterior knockdown from side alpha, and then advancing a line to the second floor, quadrant 1 apartment, for primary search and fire control."*

- Declaration of strategy
    - Offensive
    - Defensive
        - *"Units will be operating in the offensive strategy."*

- Assumption of command
    - Naming of command
    - Mode of command
    - Accountability location
        - *"Captain from Engine 101 is establishing Clocktower Lane Command in the tactical mode. Accountability will be at Engine 61 on side alpha."*

- Resource Determination
    - If the incident involves a working fire, in most cases Command should request the Working Fire Task Force
        - *"Dispatch the Working Fire Task Force."*
    - Consider additional alarm assignments if the fire has taken control of the structure or civilians are trapped
    - Consider appropriate staging
        - *"Dispatch the Working Fire Task Force and a second alarm. Have all second alarm units Level Two Stage at the Park and Ride at Snowden River Parkway and Route 32."*

- When designating a Level Two Staging area, Command shall designate a Staging Area Manager to manage, log, and report staging area resources. If no Staging Area Manager is designated by Command, the Engine Company officer from the first engine to arrive in the Level Two Staging area shall assume the role and responsibilities. If it is not necessary for the entire crew of their unit to used to manage the staging area, that officer shall appoint another to be Unit Leader of the unit on which they arrived. Channel six (6) of the incident's assigned zone will be used for staging area communications. Command and the Staging Area Manager will continually communicate as to the number and type of units that are available in the staging area. Staging can request and receive resources from Howard Communications or from an established rehabilitation area, as designated by Command. All units in staging shall monitor that channel until deployed to operational areas.

- Continue with IAP work assignments for arriving resources
  - *"Command to incoming units, **unit assignments will be made by Command**."*
  - Second arriving unit task-location-objective
    - *"Command to Engine 61."*
    - *"Engine 61, go ahead."*
    - *"Engine 61, pump the hydrant for E101, with your crew to report to side alpha, take a line from Engine 101, and back up Engine 101 on the second floor quadrant 1 apartment, primary search and fire control."*
    - *"Engine 61 is direct with our assignment to extend a line from Engine 101 on side alpha to back up Engine 101 on the second floor, quadrant 1, to assist with primary search and fire control."*

  - Third arriving unit task-location-objective
    - *"Command to Engine Tower 10."*
    - *"Tower 10, go ahead."*
    - *"Tower 10, proceed to side alpha, take a line from Engine 101, and primary search and check for extension on the third floor. You will be operating above the fire."*
    - *"Tower 10 is direct with our assignment to extend a line from Engine 101 on side alpha to the third floor for primary search and checking for extension. We will be operating above the fire."*

  - etc.

Once the Initial Radio Report is transmitted by the IC and Command is established, Command shall either conduct or assure that a 360 degree assessment of the structure, that utilizes a thermal imager if available, is quickly completed. Once completed, Command shall transmit a **Follow-Up (Basement) Report** that includes:

- Results of the 360 structure assessment
  - Assessment of occupancy with **total number of stories**
    - *"Side Charlie shows a three-story middle-of-the-group townhouse, ..."*

- Stories visible below roof (or gutter) line.
  - *"… with two stories visible **below the roof (or gutter) line** …"*
- Basement type
  - *"… **including** a walk-up basement with a lookout window."*
- Basement condition.
  - *"Basement appears to be unfinished."*
- Conditions visible from side Charlie.
  - *"Fire showing from floor number two, quadrant two."*

- If person transmitting the Follow-Up Report is the IC
  - If any, changes to problem identification
  - If any, changes to IAP
  - Confirmation of the overall incident strategy
    - *"… Units will continue to operate in the offensive strategy …"*
  - Confirmation of the location of PAT tag accountability collection
    - *"… Accountability will be at Engine 101 on side alpha."*

Determining Overall Incident Strategy:

The Overall Incident Strategy, which reflects the incident's risk management strategy, must be determined prior to formulating the initial IAP. There are two distinct strategies; **offensive** and **defensive**. The two distinct strategic choices dictate in simple and understandable terms how close the emergency responders will get to the incident's Hazard Zone. NEVER combine offensive and defensive operations in the same fire area. This overall strategy will then serve as the basis for formulating the IAP, which is the next step. Safety is the number one priority for both civilians and responders, and effective safety practices begin by being in the right overall risk management strategy, either offensive or defensive. Which strategy is chosen depends on the incident's size-up assessment and critical factors weighed against the following Departmental **Incident Risk Management Plan**:

- Risk Management Concept 1: We will risk a lot, in a calculated manner, to save savable lives.
  - If there is a possibility that there are savable lives inside a structure, and it is reasonably safe to conduct offensive interior firefighting, the offensive strategy is appropriate. If fire conditions indicate that the interior of the structure is not survivable or that interior firefighting would not be reasonably safe, interior firefighting is not an option, and the defensive strategy is required.

- Risk Management Concept 2: We will risk a little, in a highly calculated manner, to save savable property.
  - We will risk a little in a highly calculated manner to save savable property. If a Known Life Safety Hazard is not a critical incident factor, and it is reasonably safe for firefighters to conduct offensive interior firefighting, a carefully calculated lower risk offensive strategy is appropriate.

- Risk Management Concept 3: We will not take any risk at all to attempt to save what is already lost.
    - If fire conditions indicate that the interior of the structure is not survivable, or that interior firefighting would not be reasonably safe, interior firefighting is not an option. The defensive strategy is required.

Offensive Operations:

Offensive operations are operations being conducted inside a hazard zone. They may include exterior or interior operations. Offensive and defensive operations shall never be simultaneously undertaken in the same fire area. Priorities are:

- Rescue
- Fire control
    - Expect fire control within ten minutes, and revise overall strategy and IAP accordingly.
    - Re-evaluate overall incident strategy at least every five minutes.
    - Command must verbally acknowledge each five minute notification from Communications by re-announcing the incident's strategy over the assigned tactical radio frequency until the incident is placed under control, or until Command requests to discontinue or restructure the notifications.
    - When in the offensive overall incident strategy, certain exterior operational tactics may not only be appropriate, but in fact may be the *most* appropriate fire attack tactic. An example of this may be Command's intention to employ a **quick exterior knockdown** and then an advance crews to interior positions for fire control operations. Current research clearly demonstrates the advantages of keeping a fire ventilation-limited by using effective flow path control, and quick application of water through available external openings prior to interior attack, both of which consist of exterior tasks that can be employed while in the offensive strategy. Crews must be well disciplined and not make entry into an interior Hazard Zone until assigned to do so by Command, understanding that **operating in the offensive overall incident *strategy* may not mean that Command is employing interior attack *tactics* at the moment**.

- Property conservation
- Customer stabilization

Defensive Operations:

Defensive strategy operations are essentially "holding actions" used to keep the hazard from spreading and protecting exposures. These operations become necessary when the critical factors indicate that the *risks of offensive operations outweigh the potential benefits*. This might occur when:

- The benefits of offensive operations are simply too little (as in a vacant abandoned structure).
- The hazard is simply too evolved to be effectively controlled by offensive operations (as in a large, evolved, free burning fire).
    - Once initiated, if defensive operations are effective at reducing the hazard, the risks of potential offensive operations may become reduced to the point that the benefits outweigh the risks. At that point, Command may change the overall incident strategy from defensive to offensive, and tactics may change to offensive exterior or even interior operations.

- The resources available on the scene are not yet adequate to safely initiate offensive operations, making defensive operations appropriate until additional resources arrive. Once adequate resources are in place, the overall incident strategy may change to offensive operations consisting of exterior or even interior operations.
- Defensive operations are NEVER conducted inside the Hazard Zone, but are conducted near the Hazard Zone – from safe locations.
    - Ensure firefighter safety at all times
    - Clearly transmit and define the hazard zone that is defensive only, *including collapse zones*.
        - Be certain of reference designations (primary fire structure, bravo, delta, etc.). Use actual structure addresses only as confirmation information and only when absolutely sure about their accuracy.
    - Establish cut-offs
    - Protect exposures (possibly with master streams)
    - Search exposures

Once the overall incident strategy is established, tactical priorities and the initial IAP can be formulated. If the overall incident strategy changes, the IAP will also change and a structured process be used to communicate the change to all operating units. Incident size-up is an ongoing process.

The Incident Action Plan and Establishing Tactical Priorities:

Command must ensure that an adequate initial size-up of the incident scene has occurred, that the incident's critical factors have been identified, and that an overall strategy decision has been made and communicated PRIOR to formulating an initial IAP or beginning interior firefighting operations. Additionally, it is crucial that both the initial IC functioning in the Tactical Command Mode (if there is one) and the IC that will be functioning in the Strategic Command Mode (who will be assuming Command from in a command vehicle) *continually* reassess these things and *continually* evaluate the risk versus benefit of all tasks to be accomplished on every incident.

Always establish an action plan that is consistent with the overall incident strategy.

IAP priorities and operational considerations for structures include:

- Assure proper overall incident strategy
- If a fire incident, assure likely fire spread path has been identified
- Hazard verification
    - Investigate to verify the exact location, nature, and extent of the hazard, including the specific location, fire floor, and the extent of fire extension.
- Objectives aimed to achieve established key benchmarks as appropriate for the type of incident. Once achieved, the accomplishment of those **key benchmarks** shall be transmitted by Command to Howard Communications emergency dispatchers. ICs shall document and immediately transmit to Howard notification of certain benchmarks that have been achieved.
- **Rescue** and occupant control
    - Protect, remove, and provide care to endangered customers.
        - Consider the most effective method (evacuation or protection in place).

- Primary search to obtain **"Primary Search Complete"** benchmark (Command shall transmit benchmarks to Howard Communications as soon as they are achieved).
- Secondary search to obtain **"Secondary Search Complete - All Clear"** benchmark.
- Provide short-term customer service to affected parties once the hazard is mitigated.

- Fire control
  - **Exposures** protection.
  - **Water Application: Quick exterior knockdown** tactics prior to interior operations provide many benefits. Care should be taken to NOT significantly disrupt the existing flow path dynamics, accomplished by using straight streams and applying water through only the lower half of openings. Employing the *tactic* of a quick exterior knockdown is part of an *offensive* overall incident *strategy*, and in no way implies that the IC has declared a defensive overall incident strategy. When utilized, units should still position and prepare themselves for offensive tactics.
  - **Confinement: "Fire Under Control"** benchmark, defined as a fire that is no longer free burning, that crews are in position to effectively discover and mitigate fire spread in the structure of origin, fire spread is unlikely (it is "contained"), and the fire no longer threatens any exposure. This benchmark usually precedes the overhaul phase.
  - **Extinguishment: "Fire Out"** benchmark, defined as the absence of fire after appropriate investigative and overhaul activities have taken place and no hidden extension is confirmed.
  - Assure that all personnel in the Hazard Zone are working under the protection of a charged hose line, including truck and squad companies.
  - Assure that active measures to control unintentional non-tactical ventilation are implemented.
  - Take early actions to establish uninterrupted water supply.
  - Control utilities and building systems (gas, electric, HVAC ventilation systems).
  - **Overhaul:** Once the fire is extinguished, the objective is to **overhaul**, **salvage, and ventilate** so that incident conditions cease causing damage. These activities end at the point where cessation of any further property destruction occurs, whether from fire, water, mitigation activities, weather, or any other potential cause.

- **Vehicle Rescue and EMS**
  - "**Patient Extricated**" benchmark, as appropriate.
  - "**Helicopter Airborne**" benchmark, as appropriate.

- **Hazardous Materials**
  - "**Isolation of Hazard**" to recommended distances benchmark, as appropriate.
  - "**Hazard Mitigated**" benchmark.

In formulating and implementing the IAP, with particular attention toward accomplishing in the early command stages, Command shall:

- Ensure that a risk assessment is accomplished and the **critical incident factors are identified** and considered.

- Ensure that potential risks to operating personnel have been identified, and steps to reduce risk are incorporated into the IAP whenever possible.
    - **If personnel are operating in an IDLH, they shall do so under the protection of a charged hose line at all times. Ensure that a charged hose line is available on every floor where operations are taking place and fire spread is possible, and when opening overhead void spaces to check for fire travel and extension.** This includes special service companies. Either assign an engine company to operate on the same floor, or assign the special service company to advance a hose line to their assigned search floor. The only exception is if Command determines that a known life hazard exists and a rapid rescue is to be attempted after considering all critical incident factors, risks, and potential benefits.

- **Recognize indicators of fire location, travel, development, and behavior**. Indicators can include visible fire, smoke color, smoke velocity (from increased pressure from high temperatures), smoke density, and heat detected by thermal imager. Be particularly alert for extreme fire behavior.

- **Identify the expected flow path for fire development EARLY**. Assess the structure for any existing openings and their height in relation to the seat of the fire, and anticipate airflow and fire spread to the upper opening. Actively control non-tactical ventilation upon structure entry. Understand the following premises (Underwriters Laboratories, 2010):
    - **Keep ventilation-limited fires ventilation-limited until water is being applied.** Fires that have progressed beyond the incipient stage are likely to be ventilation-limited when the fire department arrives. Once a fire is ventilation-limited, ANY INCREASED AIR FLOW will result in increased fire development and heat release. Introducing airflow by entering and attacking a ventilation-limited fire can result in significant and catastrophic fire spread (typically occurs 1-3 minutes after airflow, whether intentional or non-tactical, is introduced).
    - **Limit unintended non-tactical ventilation** and do not place companies in attack positions where rapid fire spread is possible from likely events, such as when a window might suddenly fail.
        - Recognize the difference between "tactical ventilation" and "non-tactical ventilation", and understand the potential impact of both on fire development. Ensure companies take real and substantial efforts to control the flow path and eliminate or reduce unintentional non-tactical ventilation. Assure door operators are assigned at attack points as necessary to prevent unintentional influx of ventilation. Carefully apply tactical ventilation and fire control tactics in a well-*communicated* and well-*coordinated* manner.

    - **Anticipate ventilation profile changes** that can occur as a result of tactical action or fire effects on the structure (**such as a sudden window failure**). These events can change the flow path very quickly and can create untenable conditions for crews within seconds.
    - Recognize the potential impact of windy conditions on fire behavior and implement appropriate tactics to mitigate the potential hazards of wind-driven fire.

Ongoing Risk Assessment, Management, and Reassessment of Risk:

All commanders, supervisors, and firefighters shall continually assess the incident's existing and developing critical factors and the risk versus benefit associated with ongoing operations. The following must be continually addressed:

- Assure that emerging risks to personnel are continually re-assessed.
- Reassess and ensure operations are in the correct overall Incident Strategy.
- Reassess the ventilation flow path of the fire and ensure unintentional non-tactical ventilation is actively being limited.
- Assure that a charged hose line is available on every floor where operations are taking place and fire spread is possible.
- Quickly identify and react to emerging "**Safety Red Flags**", because they can end up injuring or killing us. Officers must always take a pessimistic approach when sizing-up, assuming the worst until determining otherwise. A red flag will not necessarily change the overall incident strategy or incident action plan, but it must be identified and addressed by Command and the rest of the Hazard Zone management team:
    - Non-tactical ventilation fire effects
    - Fire in the attic space
    - Fire in a basement
    - Operating above a fire (basements, floor above the fire)
    - Zero visibility
    - Encountering high heat
    - Reports of, "we can't find the fire"
    - Reports that state "fire control," but you can still see active fire conditions from the Command Post
    - Victims discovered
    - Wind-driven fires
    - Smoke or fire showing from cracks in walls
    - Reinforcing fire attack position more than once

Companies assigned to areas where IDLH conditions may be or rapidly become present shall be in appropriate protective equipment at all times. This equipment shall include full Personal Protective Equipment (PPE) and donned SCBA. Tactical and task level supervisors are responsible for the air management for their assigned crew or crews. Air supply shall be sufficient to exit the IDLH prior to the low air alarm sounding. The minimum number of personnel assigned to a crew or a team operating in a Hazard Zone shall be two firefighters with a least one portable radio. Crews or teams always go in and come out together, and remain in *close* contact while operating within the IDLH atmosphere. All personnel shall remain in contact with their company officer or assigned supervisor by voice (including radio), vision (thermal imager), or touch (hose line).

Command Progress Reports are radio reports that provide information on the evolution of an incident. Progress reports may indicate that an incident is continuing to escalate or is being brought under control. Progress reports should also represent a "picture" of the activities underway and the degree of success of the operation. The reports are intended to keep officers and companies informed on incident status as well as to provide a recorded documentation of the incident. Units that are still responding or

who have arrived at staging or base should pay particular attention to progress reports in order to have an understanding of the situation before becoming engaged.

Command shall transmit Command Progress Reports on the main incident channel whenever benchmarks and significant tactical objectives are achieved, and as needed throughout the incident. At a minimum, the first progress report shall be transmitted at approximately the ten minute point into an operation, and every ten minutes thereafter. The first progress report is quite comprehensive:

- Contact Howard Communications
- Confirm the address or location of the incident
- Define commitment of resources
- Define the hazard
- Describe the building or involved area
- Define strategic mode
- State status of search
- Define extent of involvement or hazard
- Provide a brief description of major tactical operations
- Describe the level of containment of the fire or hazard
- Describe the fire ground layout or operational area
- Estimate time prediction for holding units
    - *"Clocktower Lane Command to Howard. We are using all companies from the first alarm for a fire on the second floor of a large three-story apartment structure of wood-frame construction. We are operating in an offensive strategy. Primary search is negative on fire floor and still underway on the floor above. Fire is on one floor with about 25 percent involvement. We have three lines in operation and are still actively searching the structure and two exposures. We will be holding all units in excess of an hour."*

Subsequent progress reports may be shortened as appropriate.

- *"Clocktower Lane Command to Howard. We are continuing to use all companies. Fire is under control, but not yet out. We have a primary and secondary all clear for the primary fire building and both the Bravo and Delta exposures. We will be continuing to hold all units for more than an hour."*

Changing Overall Incident Strategies:

Command may at any point conclude that a change in Overall Incident Strategy is necessary. When moving from a defensive to an offensive overall incident strategy, Command should be methodical and thorough in assigning objectives and operating locations to units. When moving from an offensive to a defensive strategy, ***extreme care and a strong Command presence is essential***. Command must not hesitate to change from an offensive to defensive mode when it is indicated, and the change must be *decisive, clear,* and *rapid*. It must be executed in a specific, consistent, and standardized manner so that operational personnel can anticipate the steps of the process once initiated.

Offensive to Defensive Strategy:

- The announcement of a change from an OFFENSIVE TO DEFENSIVE strategy shall be made as follows:

- Command shall request that Howard Communications emergency dispatchers broadcast the **Emergency Tone** and **Emergency Traffic** channel marker.
  - *"Command to Howard."*
  - *"Howard to Command, go ahead."*
  - *"Transmit the Emergency Tone and initiate the Emergency Traffic channel marker."*
  - (Emergency Tone transmitted on all fire ground frequencies and Emergency Traffic channel marker is initiated)

- Command shall declare Emergency Traffic and transmit the change in strategy to all Hazard Zone units in the following manner:
  - *"Command to all fire ground units. Emergency traffic. Shifting to the defensive strategy. All interior units exit (or abandon, as appropriate) the structure. *All interior units report PAR's upon exit."*
    - *Alternatively, Command can instead order *"All units prepare for a role call PAR after exit"* if the number of interior units on the scene may present a communications problem.
    - **"Exit" the structure** will be defined as an immediate orderly withdrawal where interior lines and equipment will be withdrawn and repositioned when changing to a defensive strategy.
    - **"Abandon" the structure** will be defined as an immediate emergency retreat where all hose lines and heavy equipment will be left in place and all personnel in the Hazard Zone will exit the structure as quickly and as safely as possible.

- Command shall prompt the Howard Communications emergency dispatcher to repeat Command's statement verbatim.
  - *"Howard to all fire ground units. Emergency Traffic. Command advising shifting to the defensive strategy. All units exit the structure. *All interior units report PAR's upon exit."*

- Command shall account for all units in the Hazard Zone.
  - Company officers shall account for their crews and advise their supervisor (D-G supervisor, or Command) as to the status of their crew upon exiting. D-G supervisors shall notify Command of the PAR status of the individual crews assigned to them upon their exit.
  - Command's greatest priority once a strategic shift has been initiated is the safe exit of all units from within the Hazard Zone. Upon switching from an offensive to a defensive overall incident strategy, Command shall verify accountability for all units operating in the Hazard Zone as soon as possible. PAR reports should be conducted face-to-face if possible, and in accordance with General Order 300.02: Personnel Accountability.
    - Level One staged units and other units working outside the Hazard Zone shall maintain radio silence until all PARs from hazard zone units have been tallied (unless they have emergency or high priority traffic).

- Command shall transmit *"All Hazard Zone units have reported PAR"* once verification of Accountability is accomplished.
- Command shall transmit *"All units may resume normal radio traffic"* once a successful move from offensive to defensive has been achieved, and prompt Howard Communications to remove the Emergency Traffic channel marker.

The Command Transition Report and Transition From Tactical Command Mode to Strategic Command Mode:
If the Tactical Command Mode has been established by a first-in officer, upon arrival of the first chief or command officer, a Command transition to the Strategic Command Mode shall occur if an active Hazard Zone exists or if there are still tactical benchmarks to coordinate. The first arriving chief or command officer shall respond directly into the scene to a suitable Strategic Command Post location with a clear view of the incident scene. The objective of this initial command transfer is to strengthen the functions of command and provide increased support for operational resources. This chief or command officer's **Command Transition Report** shall include the following:

- Perform size-up of incident's critical factors
  - Verify overall incident strategy is appropriate
  - Verify that current operating positions match the current incident conditions.

- Transmit that your unit is on-scene
  - *"Battalion 1 on-scene"*

- Contact the initial IC (by face to face if possible) and transmit that you will be transferring Command:
  - The IC functioning in the Tactical Command Mode remains in command until the transfer of Command has been confirmed.
  - Confirm all achieved benchmarks and Hazard Zone operating positions and their objectives with Command (the IC functioning in the Tactical Command Mode). If a face-to-face transition cannot occur, this might sound like:
    - *"Battalion 1 to Command"*
    - *"Command to Battalion 1, go ahead."*
    - *"Confirming that you have Engine 61 operating interior on floor number one with a hose line from Engine 61 for primary search and fire control, Engine 11 is operating interior on floor number one with a hose line from Engine 11 for primary search and fire control, that you have a "Primary Clear" on floor number 2 and Truck 6 is operating with a hose line from E61 on floor number two for secondary search and rescue, is that correct?"*
    - *"Command to Battalion 1. That is correct."*
    - *"Battalion 1 to Command, I'll be taking command from here."*

- Advise Howard Communications that command is transferring
  - *"Battalion 1 to Howard."*
  - *"Howard to Command, go ahead."*
  - *"I'll be transferring Command from Engine 61 ..."*

- Re-announce the current overall incident strategy
    - *"... We will be continuing to operate in the offensive strategy ..."*

- Announce the Command Post location
    - *"...Command will be located on side alpha ..."*

- Make a resource determination and request
    - Assure appropriate staging established.
        - *"Staging will be located at the Park and Ride at Route 108 and 29."*

Field Communications:

Field Communications is a temporary set of communications procedures that can be activated by Command to control and limit radio transmissions from Howard Communications. These procedures allow all radio transmissions related to the active incident to be directed and routed through Command. Field Communications generally occur using Fire Ground Talk Groups, which are a specific sets of channels within the Howard County 800 MHz radio system that are identified as Alpha, Bravo, Charlie, and Delta. Each talk group has a set of tactical channels used for incident or other communications.

After Command has been established in the Strategic Command Mode, Command will normally declare the initiation of Field Communications on the incident's tactical channel. Once Field Communications has been placed in effect, Howard Communications and Command will communicate with each other as needed, but Command becomes the central point for communications to and from units operating on the incident scene and for units en route.

- *"Command to Howard, Command is initiating Field Communications."*
- "(Howard Communications sounds a single alert tone). *Attention all units on box alarm 9-1, Field Communications is now in effect."*

Once Field Communications is in effect, responsibilities of the Howard Communications emergency dispatchers include:

- Relay of any additional information received to Command.
- Notifications to Command and radio announcements for events as outlined in Department general orders, such as
    - Those required for changes in overall incident strategy
    - Those required and specified for Mayday and emergency situations
    - Single alert tones and incident duration updates every 15 minutes
    - Etc.

- Documentation of the incident in CAD and CAD comments, including the incident benchmarks
- Monitor other tactical channels being used for the incident
- Process any requests made by Command
- Monitor incident transmissions and act as a second set of ears for Command.
- Whenever possible, the Howard Communications emergency dispatcher shall track and notate assignment of resources and group and division supervisors in the CAD. This information may become invaluable should incident accountability become critical.
- Transmit the Emergency Tone as requested by Command

- Initiate the Emergency Traffic radio restriction and channel marker as requested by Command
- Repeat Command announcements as requested by Command

Howard Communications emergency dispatchers shall intervene by contacting Command anytime a message appears to NOT have been received or acknowledged by Command after the second attempt. In the case of an emergency message, such as a Mayday or emergency identifier activation, dispatchers need not wait for the second attempt before contacting Command to verify their receipt of the emergency message.

When the IC no longer wishes to have Field Communications in effect, the IC shall notify Howard.

- *"Command to Howard, Command is terminating Field Communications."*
- "(Howard Communications sounds a single alert tone). *Attention all units on box alarm 9-1, Field Communications is now terminated."*

Strategic Command and the Command Team:

Once Command is established at an incident that presents an on-going Hazard Zone, Command shall transition to the Strategic Mode within a Command Post as soon as possible. This transition shall be transmitted by radio to all incident personnel. It shall be a priority to establish a Strategic Command Team as soon as possible for ongoing Hazard Zones.

The **Strategic Command Team** is, at a minimum, comprised of an *IC functioning in the Strategic Command Mode* and a *Command Aide*. A Strategic Command Team should be assembled as soon as possible after establishing a Strategic Command Post. The team can be expanded as is required to support the command functions made necessary by the incident. The roles within the team are:

- An IC functioning in the **Strategic Command Mode**; typically a chief or command level officer that is commanding from *outside of the tactical environment, and within an environment that facilitates and enhances managing the functions of Command*. A stationary Command Post has been established, in which the IC and their Command Aide (and possibly others) are actively managing a tactical worksheet, recording the position and function of all assigned resources, assuring the IAP aligns with the critical incident factors, and monitoring radio transmissions closely in a noise and distraction-free environment, preferably using a headset. Command functions include, but are not limited to: confirming the overall incident strategy, confirming and continuing to formulate an IAP that aligns with the identified critical incident factors, establishing objectives based on the incident's critical factors, evaluating the need for additional resources, directing and assigning responding resources, and coordinating activities necessary for overall operational control.
    - This is in contrast to an IC functioning in the **Tactical Command Mode.** They are typically a company officer that is *performing all the responsibilities of Command while on-foot and from within the tactical environment*. They are maintaining an exterior position near the Hazard Zone, and are NOT committed within an IDLH or potentially rapidly evolving atmosphere. The difference for the IC functioning in the Tactical Command Mode is the conditions under which Command is typically being managed.

- The **Command Aide** is an officer or firefighter assigned and dedicated to assist the IC functioning in the Strategic Command Mode from *within the Command Post* whose primary function is to enhance the effectiveness of incident management through technical support of the IC. *The intent of the*

Command Aide position is NOT to involve the Aide in tactical or company-task level assignments during emergency incidents. They should not be assigned a firefighter or fire officer role outside of the Command Post on the fire ground unless their technical support of Command is being accomplished by another resource. Within the Strategic Command Post it is expected that the IC and their supporting Command Aide are actively managing a tactical worksheet, recording position and function of all assigned resources, assuring the IAP aligns with the critical incident factors, and monitoring radio transmissions closely in a noise and distraction-free environment, preferably using a headset. Specific operational duties can include:

- Assisting with incident tactical worksheet and documenting or recording incident resources and information
- Monitoring tactical radio channels and assisting with communications
- Building inspection or incident preplan review during incidents
- Functioning as the initial Accountability Manager and/or assisting with unit accountability
- Assisting with incident safety procedures as directed
- Assisting in the mobile command post on larger incidents
- Performing as a liaison with other agencies as directed
- Serving as an Assistant Accountability Manager when their BC is operating as a D-G supervisor and Level III Accountability is in place.
- Serving as a partner to the Battalion Chief should the need arise to operate in an IDLH environment.
- A Command Aide may have other assigned duties within the command post as directed by the IC.
- The **Battalion Aide** is a staffed Department position that shall serve as the Command Aide when a Strategic Command Post is established. In addition to the operational duties listed for the Command Aide, the Battalion Aide shall provide direct administrative support to the field Battalion Chief throughout the shift.
  - The radio designations for the Battalion Aide positions shall be "Battalion 1 Aide" and "Battalion 2 Aide."
  - Apart from responding to emergency incidents functioning in the role of Command Aide, duties shall include operating the BC vehicle, maintaining the BC field office, assisting with building and maintaining daily staffing plans, completing and maintaining daily overtime availability and other appropriate documentation (databases, logs and files), assisting with coordination of battalion training and shift training, coordination of battalion responsibilities such as project management, resource coordination, performance review completion, and other field battalion officer duties as assigned by the field Battalion Chief.

- (Optional) A **Senior Advisor** chief officer may be present within the Strategic Command Post supporting the IC, advising, and:
  - Verifying that enough resources are assigned to the incident.
  - Verifying that the overall incident strategy and IAP are current and in-line with forecasted incident conditions.
  - Confirming the incident organization chart matches the size and complexity of the incident, and determining the need for expansion to additional NIMS ICS positions.
  - Confirming the accountability system in place is both appropriate and effective.

- Assisting with the management and logistics of the Command Post.
- Potentially assuming Command should the need to expand the ICS system arise, with the previous IC often assuming the Operations Section Chief position.

- (Optional) A **Command Post Support Officer** may be designated and:
  - Coordinating the assignment of additional NIMS positions as called for by the IC.
  - Coordinating additional resources as they arrive at the incident.
  - Coordinating and communicating with an established Level Two Staging Area Manager.
  - Assisting with communications to established divisions and groups within the command structure.
  - Coordinating and documenting elements of safety, accountability, and logistics during the incident as called for by the IC.
  - Coordinating the resolution of Command Post needs as is appropriate.

- (Optional) A **Command Post Operator** may be assigned to operate the command post vehicle and the technology therein.

Demobilization and Command Termination:

- Command shall order the demobilization of resources when appropriate. Command may be transferred to officers of lower rank (e.g. from a Battalion Chief to a company officer) during demobilization.
- Care should be taken not to exceed an effective span of control.
- Officers that are given Command, even during demobilization, become accountable for all incident command responsibilities, including but not limited to: overall authority for management of the incident, the responsibilities and duties of all unassigned ICS positions, situational awareness for the position and function of all operating units, awareness of incident critical factors, revision of the IAP, management of unit task assignments, evaluation of progress, accountability of incident personnel, and incident risk assessment and safety.
- Command transitions that occur as part of demobilization MUST include:
  - A face-to-face transition between incident command officers.
  - A review of the IAP and overall strategy of the incident.
  - A complete understanding of units still on the scene, their current assigned tasks, and their operating position.
  - A PAR of each unit operating on the incident scene.
  - Must be announced on the radio.

- The announcement of a transition of Command during demobilization shall be made as follows:
  - *"Command to Howard."*
  - *"Howard to Command, go ahead."*
  - *"Battalion 1 has transferred Command to Truck 2. All units operating on the scene have been confirmed to be PAR."*
  - *"Howard is direct, Truck 2 is now in command."*

- Command shall terminate Command upon the conclusion of emergency service operations at the scene of an incident, usually upon the departure of the last unit from the scene.

- The announcement of the termination of Command shall be made as follows:
  - *"Command to Howard."*
  - *"Howard to Command, go ahead."*
  - *"Terminating Clocktower Command. All units will be going in service as ready."*

Incident Command Lessons Learned Analysis:

The organization shall maintain a proactive approach to quality improvement through routine analysis of incident management events and subsequent development of any lessons that could be learned, procedures that could be improved, and/or training that could be developed. Personnel that function as an IC shall actively participate in an established Lessons Learned educational and quality assurance process for those incidents designated by the Fire Chief, Department Operations Officer, or Emergency Services bureau chief as appropriate for quality assurance analysis.

Resource Deployment Models for Arriving Companies:

- Specific resource deployment and assignments may be outlined in General Order Deployment Models that pertain to specific types of structures or occupancies. These deployment models shall be considered the default unit task assignments as indicated. In these General Order Deployment Models, companies are expected to complete the listed tasks and responsibilities based upon their position in the arrival sequence, but should remain alert to being directed to different tasks and responsibilities by Command. Once Command is established, whether Command is an initial company officer or a chief officer, Command has the autonomy to deviate from an established resource deployment model and assign tasks and responsibilities to arriving companies in order to address Command's established incident action objectives.
- IC's shall transmit and declare whether the General Order Deployment Model is to be followed, or whether command shall be making unit assignments. *"Command to incoming units ...*
  - ***"... unit assignments will be made by Command."***
  - ***"... unit assignments will be by General Order."***

- When Command makes unit assignments, Command shall communicate the new objectives being assigned to arriving units, and each must be advised and acknowledged through radio communications or face-to-face interaction between supervisors.
- When Command assigns a task or establishes an ICS position (assigning an individual to manage the position), that action will be transmitted by radio, and confirmation of the assignment with those involved units will be obtained.
- When Command directs incoming units to assume unit assignments per General Order, or if Command is not yet established, arriving **companies shall announce their arrival order and the tasks assignments they are undertaking** as outlined in the General Order Deployment Model for the appropriate type of structure or occupancy.
  - *"E31 on location as the third arriving engine. We have our own hydrant supply and are positioned on side Charlie, and are stretching an inch and three quarter hose line from E31 to the side Charlie garage door to standby if needed for fire control."*

- Companies responding from an "out of position" location shall notify Command (if established), or the highest-ranking responding officer (e.g. a responding chief officer) if Command is not yet established.

- The process and discipline for control and accountability of each resource is of extreme importance. This is a responsibility of not only Command, but of all officers, firefighters, providers, unit leaders, branch directors, and D-G supervisors.

REFERENCES

- General Order 300.02: Personnel Accountability
- General Order 300.04: Mayday Operations
- General Order 300.11: Rapid Intervention Crews
- General Order 310.01: Single Family and Townhouse Structure Fire Operational Guidelines
- General Order 310.02: High Rise Structure Fires
- General Order 310.04: Flammable Gas Fires
- General Order 410.01: Communications
- NFPA 1561(2014): *Emergency Services Incident Management System and Command Safety*
- Department of Homeland Security's National Incident Management System (December 2008), Appendix B: Incident Command System.
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SUMMARY OF DOCUMENT CHANGES

2016-10-31-1100

Significant updates that include:

- Includes and provides updates for many concepts of previous version
- Aligns with current Residential Structure Fires General Order
- Establishes the organizations overall Incident Risk Management plan
- Establishes strategic benchmarks for certain types of incidents
- Establishes the United States Fire Administration/National Fire Academy *Field Operations Guide* (Document ICS 420-1, July 2016) as our official reference for ICS
- Establishes a procedure for field (IC) based incident communications
- Incorporates many aspects of current officer training
    - Provides detailed structure of radio reports Defines specific command roles and responsibilities of the company officer
    - Establishes expectations of command strategic level ICs, including the use of a tactical worksheet
    - Outlines common operational flow and how it relates to command and control
    - Outlines local roles and responsibilities of the Level IV and V Command Team, including the Command Aide and Senior Advisor

    - Provides guidelines to assess and classify structure size
- Provides procedure for transfer of command
- Provides procedure for changing overall incident strategy
- Provides direction on reference to interior floors of multi-story structures
- Incorporates flow path and ventilation limited fire recognition and awareness
    - Defines Non-Tactical Ventilation and emphasizes positive control of unintended ventilation
- Establishes that all companies operating shall operate under the protection of a charged hose line
- Establishes participation in a Lessons Learned analysis of designated incidents as an IC responsibility
- Establishes a defined process for demobilization of Command
- Reinforces that ICs can deviate from General Order Deployment Models, and provides radio report structure and procedures to do so
- Defines and provides local Level One and Level Two staging procedures
- Defines Known Life Hazard
- Adopts the NFPA definition for Emergency Traffic
- Defines a Personnel Accountability Report (PAR)

FORMS/ATTACHMENTS

- Attachment A: Incident Critical Factors, Basement Type, and Building Size Quick Reference

APPROVED

John S. Butler, Fire Chief
Office of the Fire Chief

Authors:

Frank Rommel, Deputy Chief	John Jerome, Deputy Chief	Gordon Wallace, Assistant Chief
Department Operations Officer	Department Executive Officer	Emergency Services Bureau

Attachment A - Critical Incident Factors, Basement Type, and Building Size Quick Reference Guide

OCCUPANCY

- occupancy (single family, multi family, strip mall, large comm, big box)
- occupancy type (business, mercantile, public assembly, institutional, industrial, residential, multi-residential, strip mall, commercial, manufacturing, storage, high rise)
- value
- status (open/closed, occupied/vacant, abandoned, under construction)
- type of contents
- loss control
- moral hazard

BUILDING (STRUCTURE)

- size
- interior arrangement/compartmentalization
- construction type and features
- age
- condition
- outside openings
  - Are any **susceptible to rapid failure and flow path impact?**
  - Do any need to be **actively controlled?**
- value
- utility characteristics
- effects of fire
- fuel load/how much is left to burn
- fire protection features

FIRE

- size, extent, location, and stage
  - Is fire **ventilation-limited?**
- What is the **current flow path**?
- most dangerous direction of extension
- time of involvement, fire load
- fuel type
- products of combustion liberation
- fire perimeter
- how widespread
- ability to operate on fire
- time projection on building
- is contents or structure on fire

LIFE HAZARD

- number of occupants
- location, condition
- in capacities, access
- search resources
- fire control for search
- EMS needs, exposures
- hazards for firefighters
- escape routes

ARRANGEMENT

- distance of external exposures
- combustibility of exposures
- access and arrangement of internal exposures
- most dangerous direction of fire extension
- barriers/obstructions to operations
- limitations on apparatus movement
- multiple buildings

RESOURCES

- anticipated arrival of tactical support
- staffing and equipment on scene, responding, and available
- condition of responders
- number and capability of responders
- capability of command staff
- hydrants
- after supply
- built-in protection systems

SPECIAL CIRCUMSTANCES

- weather (wind direction and intensity?)
- time of day
- day of week
- season, holidays
- special events
- social unrest

ACTION

- effect of current action
- areas not yet covered
- stage of operations as related to tactical priorities
- remote IC setup
- effectiveness of IAP
- worst case scenario
- are operating positions effective
- are resources adequate
- are operations safe
- are there layers of resources in place

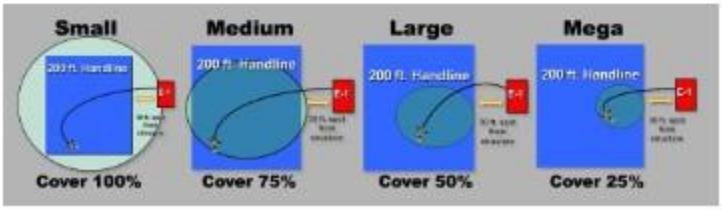
Basement Types Reference

- walk-out
- walk-up
- look-out windows
- window wells
- basement with no exterior openings
- no basement
- condition finished vs. unfinished

Building Size Reference

Given a 30' engine spot of the engine from the structure, a 200' hand line could reach ...

- SMALL - **100%** of the building interior
- MEDIUM - **75%** of the building interior
- LARGE - **50%** of the building interior
- MEGA - **25%** of the building interior



General Order 300.11: Rapid Intervention and IDLH Initial Entry Teams

DEPARTMENT OF FIRE AND RESCUE SERVICES

GENERAL ORDER
300.11

Originating From	Issue Date	Revision Date	Attachments
Emergency Services Bureau	05-20-1995	06-04-2013 (05-21)	N/A

SUBJECT: Rapid Intervention and IDLH Initial Entry Teams
APPLICABILITY: All Operations Personnel

POLICY

A procedure for the deployment and rescue of operational personnel working in Immediately Dangerous to Life and Health (IDLH) atmospheres in accordance with NFPA 1500, Sec. 6-5, and OSHA 29 CFR 1910.134. The Howard County Department of Fire & Rescue Services (DFRS) shall maintain a safe practice of an Initial Entry Team and Initial Rapid Intervention Crew (IRIC), formerly known as "Two-In/Two-Out", while engaged in structural firefighting and other operations in IDLH atmospheres.

To further support the Department's responsibility for personnel safety, a Rapid Intervention Crew (RIC) shall be established while engaged in structural firefighting and other IDLH or oxygen deficient atmospheres for the rescue of operational personnel.

DEFINITIONS

1. Initial Entry Team – a team of at least two (2) qualified personnel equipped with full protective equipment and qualified to participate in interior structural firefighting operations. These personnel must maintain constant visual and/or voice contact with each other while entering and working in the IDLH atmosphere. At least one member of this team must be equipped with a radio, and all members of this team shall have a radio if possible.

2. Initial Rapid Intervention Crew (IRIC) – a team of at least two (2) qualified personnel who observe the initial entry team entering the IDLH atmosphere and are available, trained and equipped with full protective clothing and Self-Contained Breathing Apparatus (SCBA) for immediate response to rescue the initial entry team. One (1) of these members must maintain contact with the initial entry team either visually and/or by voice or radio contact. The team can include the IC that is operating in the Tactical Command mode. At least two members of this team must be equipped with a radio, and all members should have a radio if possible.

3. Initial Phases of an Incident – includes the phases of an incident where tasks are being performed by the first arriving company with an initial entry team assigned or operating in a hazardous area.

4. Rapid Intervention Crew (RIC) – a crew specifically designated by the Incident Commander (IC) at the scene of an emergency beyond the initial stages, consisting of a minimum of four (4) qualified personnel, one being the RIC Supervisor. The RIC shall be available for the rescue of firefighters should the need arise. Depending on the size and complexity of the

incident, the IC shall establish one or more RICs. The RIC replaces or enhances the IRIC that is required during the initial phases of the incident. ICs should consider reinforcing the RIC with a Special Service company in order to provide the most effective number of personnel and compliment of tools for a potential rescue.

5. Interior Structural Firefighting – the physical activity of fire suppression, rescue or both, inside buildings or enclosed structures that are involved in a fire situation beyond the incipient stage (fire growth beyond the first material ignited).

6. Immediate Danger to Life and Health (IDLH) - an atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or impair an individual's ability to escape from a dangerous atmosphere.

7. Known Life Hazard – circumstances where responding personnel hear or see a person in distress or receive reliable information from emergency dispatchers at Howard County's Public Safety Answering Point (Howard Communications) or bystander that someone is in the IDLH atmosphere and in danger.

8. MAYDAY – a radio term used to alert the IC, Howard Communications, or other operational personnel on the emergency scene that operational personnel are in an imminently life-threatening situation.

9. Oxygen Deficient Atmosphere – an atmosphere with oxygen content below 19.5% by volume.

10. Personnel Accountability Report (PAR) – An organized reporting activity designed to provide positive confirmation of the location, assignment, and number of personnel assigned to a division, group, or unit operating within a hazard zone.

PROCEDURES

11. Initial Rapid Intervention Crew procedures shall be implemented during the initial stages of any operation within an IDLH atmosphere. They are established for the protection of the initial entry team and shall be maintained until the full RIC is in service and the IRIC is reassigned by the IC.

12. Unless there is a known life hazard, **NO** operation shall be conducted in an IDLH atmosphere until the IRIC is established.

13. When the first arriving unit does not have sufficient staffing to implement IRIC, the second arriving unit shall be responsible to establish and maintain the IRIC until relieved or reassigned by the IC.

14. Personnel making the decision to enter an IDLH atmosphere who are not in compliance with these procedures shall be required to justify their decision.

RAPID INTERVENTION CREW (RIC)

15. The Department has implemented the RIC procedure as a standard practice for all emergency incidents beyond the initial phases which have teams operating in a hazardous or IDLH atmosphere.

16. Regardless of which unit is assigned to the RIC, the IRIC requirements shall be maintained until a full RIC (minimum of four qualified personnel) is ready to assume the RIC responsibilities, unless there is a known life hazard.

17. A RIC shall be established any time one of the following conditions exists:
    - Structure fire where SCBA's and 1 ½" hose line (or larger) will be used.
    - Operational personnel are operating inside an IDLH or potentially IDLH atmosphere.
    - Incidents with the possibility of collapse or entrapment of operational personnel may exist.
    - Incidents where operational personnel might become lost or disoriented.
    - When deemed necessary by the IC.

18. It shall be the responsibility of the IC to ensure that RIC has been assigned and established.
    - Unless otherwise directed by the IC, the company responsible for RIC shall be as is outlined by THE resource deployment model found in the appropriate Department policy for that occupancy type (e.g. for a residential structure, as per the corresponding General Order)
    - If the IC deviates from the default RIC assignment outlined by the resource deployment model in Department policy, an IRIC and then RIC must still be assigned and accomplished using first alarm resources. The only possible exception to this is when KNOWN life hazard rescue operations are actively taking place. ICs should consider reinforcing the RIC with a Special Service company in order to provide the most effective number of personnel and compliment of tools for a potential rescue.

19. Once established, if any assigned RIC unit is redirected for other immediate life saving assignments, the IC shall ensure that additional resources are assigned to the RIC immediately, or as soon as is at all possible.

20. The RIC shall only be used for duties related to the safe evacuation and rescue of operational personnel.

21. The RIC shall remain within view or radio contact with the IC at all times and shall only carry out those assignments provided by the RIC supervisor at the direction of the IC.

22. On certain incidents, the RIC may be placed in a forward position to provide quicker access to operational personnel operating in the hazard area such as:
    - The floor below the fire on a high-rise or mid-rise building fire.
    - Near the point of entry on large buildings such as shopping centers, schools, or warehouses.
    - Where deemed appropriate by the IC.

23. DUTIES AND RESPONSIBILITIES OF THE INCIDENT COMMANDER, GROUP, DIVISION SUPERVISORS, COMPANY OFFICERS AND OPERATIONAL PERSONNEL

24. The IC and all fire ground supervisors (section chiefs, branch directors, group supervisors, and company officers) shall maintain constant awareness of the location and operational functions for all of their assigned units, groups, divisions, and personnel.

25. Officers assigned the responsibility for a specific tactical level management component (i.e. division or group Supervisor) at an incident shall directly supervise and account for companies / crews operating in their specific area of responsibility.

26. Company officers shall maintain an ongoing awareness of the location and condition of all members of their company.

27. When assigned to a company, operational personnel shall be responsible to remain under the supervision of their assigned Company Officer.

28. All operational personnel operating within an IDLH atmosphere shall ensure that their "PASS" device is operational.

29. Operational personnel shall operate in teams of no less than two (2), one of which shall have a portable radio.

30. It shall be the responsibility of all operational personnel to monitor changes in the fire conditions, structural stability, and changing ventilation conditions throughout the operation. Anything that could cause harm to operational personnel (sudden increased ventilation, extreme fire behavior, missing stairways, holes in the floor, open elevator shafts, partial structural collapses, etc.) shall be immediately reported to their supervisor and to Command. If you see something … say something.

31. Safety hazards shall be communicated to all operational personnel by the IC
    - Entry into hazardous areas shall be restricted by various methods such as rope, tape, or a firefighter assigned (if safe to do so).

32. Upon arrival on the scene, the RIC Supervisor shall meet face-to-face with the IC and be briefed on the following:
    - The current operational plan of action.
    - The location of all companies and divisions or groups supervisors operating within the structure
    - The location of the fire and possible areas of extension.

33. A copy of the building preplan or operational diagram shall be provided to the RIC by the IC.

34. The RIC Supervisor shall complete a 360 degree size up in order to develop a rescue plan. This plan shall typically include:
    - Identification of specific hazards.
    - Conditions and obstructions observed.
    - Size / height of building
    - Type of construction
    - Occupancy
    - Basement type
    - Confirm the location and probable progression of the fire
    - Assess the current ventilation factors impacting fire conditions
    - Confirm the location and number of operating personnel
    - Points of entry and exit

35. The RIC Supervisor shall:
    - Remain within view or radio contact with the IC at all times.
    - Develop the rescue plan based on the information provided during the briefing and size up that ensures sufficient egress is provided for interior crews and shall include ensuring that:
    - Ensure at least one ladder is located at each floor near the fire area
    - Ensure window bars are removed
    - Ensure all exterior door and gates are opened
    - Ensure any obstruction that would interfere with rapid evacuation of personnel from the structure is removed.
    - Ensure that the IC is aware of any additional resources necessary to implement the rescue plan without delay.
    - Be prepared to brief the IC regarding the rescue plan in writing if directed to do so.
    - When possible, the RIC shall not be used to accomplish these tasks if it will result in fatigue and an inability to carry out strenuous rescue efforts, which may be required.
    - Ensure that each member of the RIC has been briefed on the rescue plan and that each member understands their individual assignments.

36. The following minimum resources shall be compiled by the RIC at all incidents involving structural firefighting and other IDLH or oxygen deficient atmospheres:
    - Sufficient resources to implement the plan.
    - Spare SCBA with face piece
    - A dedicated hose line
    - Sufficient ground ladders
    - 125' life line
    - Forcible entry tools (flathead axe, haligan bar, hydraulic entry tool, bolt cutters), lights, power saws, and other equipment deemed necessary
    - One portable radio for each two-person team
    - The RIC shall obtain these resources from apparatus (engines, trucks, or squads) that are in close proximity to the incident.

37. After compiling the minimum resources noted above, the RIC shall work with the IC to obtain any other specialized equipment needed (stokes basket, hydraulic rescue tools, air bags, torches, collapse equipment, rappelling equipment, etc). The RIC Supervisor and RIC members shall have a minimum of two portable radios.

38. The RIC Supervisor shall monitor the radio for a MAYDAY or other distress / safety messages, progress reports, changes in the interior and exterior conditions or urgent messages.

39. DEPLOYMENT OF THE RAPID INTERVENTION CREW (RIC)

40. Mayday procedures outlined in General Order 300.04 shall be strictly adhered to by all operational personnel.

41. When a MAYDAY has been transmitted and immediate rescue cannot be affected by interior crews, the IC shall notify Howard Communications and typically deploy the RIC to the last known or reported location of firefighters calling the MAYDAY.

42. The RIC will be referred to as "Rapid Intervention".

43. The RIC Group Supervisor shall obtain as much information as possible from the IC regarding the exact nature of the problem and implement the rescue plan. This shall include determining how many firefighters are involved and if they are:
    - Missing, lost, trapped, cut off by fire
    - Injured or require immediate medical attention
    - In need of immediate SCBA equipment

44. To assist in obtaining the above information, the acronym "LUNAR" shall be used:
    - **L**ocation (last known location including floor number, quadrant, etc.)
    - **U**nit (identification of the crew and their unit assignment)
    - **N**ame (name of the individuals that need rescue or recovery)
    - **A**ssignment (the last known assignment given to the individuals)
    - **R**esources needed (what equipment is needed to implement the rescue plan)

45. The Rapid Intervention Unit or Group Supervisor shall communicate to the IC the progress being made and any changing conditions and other resources needed.

46. The IC shall be the only individual with the authority to cancel or terminate a Rapid Intervention operation.

REFERENCES
General Order 300.02 Accountability
General Order 300.04 Mayday
General Order 300.07 Incident Command System
General Order 310.01 Single Family and Townhouse Structure Fire Operational Guidelines
General Order 410.01 Communications

FORMS/ATTACHMENTS
NONE

Approved:

John S. Butler
Deputy Fire Chief

General Order 310.01: Single Family and Townhouse Structure Fire Operational Guidelines

DEPARTMENT OF FIRE AND RESCUE SERVICES

GENERAL ORDER
310.01

Originating From	Issue Date	Revision Date	Attachments
Emergency Services Bureau	**9/02/2002**	**06-04-2013**	**N/A**

SUBJECT: SINGLE FAMILY AND TOWNHOUSE STRUCTURE FIRE OPERATIONAL GUIDELINES

APPLICABILITY: All Operational Personnel

POLICY

This General Order provides a framework for safe operations during fire incidents involving structures that can be defined as Single Family and Townhouse structures. It outlines the responsibilities of the Incident Commander (IC) and company officers as they relate to firefighting operations and all support activities. Company officers, group/division supervisors and incident commanders are responsible for the safety, welfare and accountability of the personnel assigned to them. Personnel will follow the DFRS General Orders that relate to operational responses, including Limited Water Supply, Incident Command, Communications, Accountability, Mayday, and Rapid Intervention Crew.

DEFINITIONS

1 **NIMS** refers to the National Incident Management System and the defined positions and terminology for incident management and command structure.

2 A **Townhouse** is defined as a house attached to any number of other townhouses (three or more), each of which may have multiple floors, commonly side by side each with their own separate entrances.

3 A **Single Family,** or "detached house", is defined as a structure that is usually occupied by one household or family; has only outside walls, does not share an inside wall and does not touch any other dwelling.

4 The **Tactical Incident Commander** is typically the first arriving company officer that arrives on the scene and establishes command. They establish the initial overall incident strategy and provide direction to initial incoming units based on the current critical factors of an incident.

5 The **Strategic Incident Commander** is typically a chief officer or command level officer that operates while stationary inside of vehicle designated as the Command Post. The strategic incident commander confirms the overall incident strategy, develops an IAP that addresses the incident's strategic and tactical objectives, and coordinates activities necessary for overall operational control.

6 The **Command Aide** is a person assigned to assist the incident commander in the Command Post with documenting resources on a tactical worksheet and monitoring tactical radio channels. The command aide may have other assigned duties as directed by the incident commander.

7 The initial **Strategic Command Team** is, at a minimum, comprised of a Strategic IC and a dedicated officer or technician whose primary function is enhance the effectiveness of incident management through technical support of the incident commander (a **Command Aide**). The team can be expanded as is required to support the command functions required by the incident. Typically, a **Support Officer** for the Command Post would be the next expansion, who would then manage the assignment of additional Strategic Command Team NIMS positions and command post needs as is appropriate.

8 The Department's general **Incident Risk Management Plan** provides a framework for defining the level of acceptable risk given certain sets of circumstances. That plan translates into a clearly communicated incident strategy, either "offensive" or "defensive".

9 The **Initial Radio Report** is a highly structured radio report that is transmitted by the first arriving officer following their size-up of the incident critical factors. It officially establishes command for an incident, as well as the incident's overall strategy.

10 The **Initial Radio Report Follow-Up** is a structured report given following the Initial Radio Report that includes results of a 360 degree assessment, identifying the basement type of the structure, and reconfirms the overall incident strategy and location of accountability tag collection.

11 The **Command Transition Report** is transmitted by the arriving Strategic IC and officially transfers command from an initial IC that had been operating in the Tactical Command mode.

12 There are three distinct **Modes of Command**, and each implies that the IC is operating under different circumstances and in differing environments. Depending on which mode is declared, expectations of command capacity are adjusted.

13 If directed to **Level One Stage**, all companies except the first arriving engine and first arriving truck shall stage prior to arrival at the scene, nearby (within a block if possible) but in an uncommitted position that still allows access into the incident scene. Once staged, units shall be prepared to assume tasks as they are assigned by the IC. Engine companies should not stage past their last water source. Units arriving at their Level I staging positions shall transmit notification of their arrival to a Level I staging position to the IC. Unit personnel will remain on the apparatus and monitor the assigned incident radio channel.

14 The IC may declare **Level Two Staging** for arriving resources. When this occurs, arriving resources will then assemble at a centralized Level Two Staging area designated by the IC that is adjacent to the incident. The area should be close enough to the incident scene to provide timely access, but located out of the way and not exposed to the incident's hazards. When designated, the IC shall designate a Staging Officer to manage and report staging area resources. If no officer is designated, the Engine Company officer from the first engine to arrive in the Level Two Staging area shall assume the role of Staging Officer. Channel six (6) of the incident's assigned zone will be used for staging communications.

15 **On-Deck Staging** is the forward positioning of the crew of a unit, located just outside the immediate hazard zone and safely distanced from the entrance of a tactical position. On-deck crews are "ready for duty and next in turn", and their readiness and immediate availability is critical to being able to provide quick relief and facilitating effective air management strategy for interior crews. The most likely assignments given to on-deck companies are to provide immediate relief for crews operating in the hazard zone, to reinforce crews operating within the hazard zone, to reinforce a deployment of the designated Rapid Intervention Crew, or for a new assignment within the hazard zone. On-Deck crews will be supervised either by a division or group supervisor (if assigned) or their company officer. Once assigned, crews shall remain on-deck until given another assignment by the their supervisor or IC.

16 A **Hazard Zone** is any area or zone where there is a known or potential risk to the safety of operating personnel, including but not limited to environments that are Immediately Dangerous to Life and Health (IDLH), potential collapse zones, and areas at risk for rapid change in their safety profile.

17 A **Personnel Accountability Report** (PAR) is an organized reporting activity designed to provide positive confirmation of the location, assignment, and number of personnel assigned to a division, group, or unit. Being "PAR" signifies that *all personnel assigned to that division, group, or unit that are operating in the hazard zone have been identified, positively located, and are accounted for*. Example: "Engine 61 to Command, Engine 61 is PAR."

18 **Tactical Ventilation** occurs as a result of specific, coordinated tactical actions that are calculated to accomplish an *intended* objective relating to ventilation of a structure. **Non-Tactical Ventilation** is *unintentional* ventilation of a structure that results from other activities that taking place on the fireground, such as making access to a structure through a door or window, advancing a hose line into a structure, or creating a means of egress by removal of a window. Recent research has shown that unintentional Non-Tactical Ventilation can have unanticipated, rapid, and significant impact to fire intensity and spread, and has been attributed as a factor in several firefighter fatalities regionally and nationally.

PROCEDURES

RESPONSE

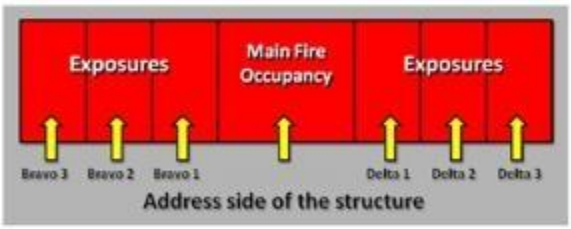
19 An exceptionally high level of discipline will be required of all officers and operational personnel during structural firefighting operations. Failure to follow any portion of the incident action plan (as defined by either general order or incident command) can lead to a breakdown of the entire operation and could have significant life-safety and other consequences.

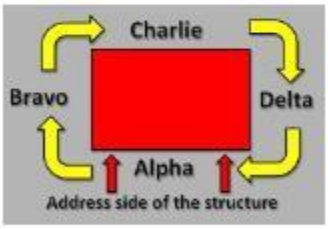
COMMUNICATIONS

20 Communicate in accordance with this General Order, the Communications General Order # 410.01, and the Incident Command System General Order # 300.07.

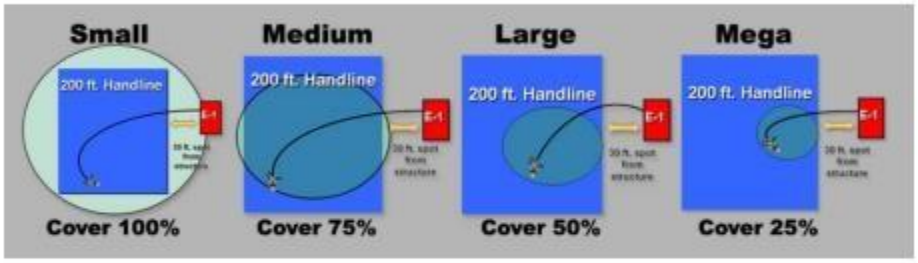
STRUCTURE REFERENCES

21 Exposures should be referenced as depicted below:





22 Structure size should be referenced as depicted below:



23 Basements should be categorized as follows:

- Type
  - Walk-out (grade-level access doors)
  - Walk-up (exterior stairwell access)
  - Look-out windows (grade-level basement windows)
  - Window Wells (below-grade basement window wells)
    - Specify if a window well window enlarged for egress is present
  - Basement with no exterior openings
  - No basement
- Condition
  - Finished
  - Unfinished
  - Unable to determine

SIZE-UP, OVERALL STRATEGY DETERMINATION, INITIAL ACTION PLAN, AND ESTABLISHING COMMAND

24 While companies are en route to an emergency, the highest ranking responding officer will make operational decisions related to the incident.

25 The first arriving officer shall conduct and communicate their size-up, their determination of overall incident strategy, their initial incident action plan, and establish command by transmitting an Initial Radio Report. The report should include:

- Unit ID and arrival to the scene
- Structure and area description
  - Size of structure
  - Number of stories
  - Occupancy type
- Problem description
  - Conditions (Nothing showing, working fire, etc.)
  - Location/floor
  - Location/side
- Initial IAP and actions taken
  - Engine 1 location
  - Water supply
  - Unit #1
    - Task (Lay out from ..., stretch a line ..., etc.)
    - Location (... into side alpha, 3rd floor, etc.)
    - Objective (... for primary search, fire control, investigate, etc.)
  - Unit #2 task, location, and objective
  - etc.
- Declaration of strategy
  - Offensive
  - Defensive
- Assumption of command
  - Naming of command
  - Mode of command
  - Accountability location
- Resource Determination
  - Consider additional alarm assignments if the fire has taken control of the structure or civilians are trapped.

26 If mutual aid units are first arriving, the first arriving Howard County DFRS officer will normally transition and assume command as the initial IC.

27 The first arriving company officer may elect to pass command in accordance with Incident Command System General Order # 300.07. This shall only be done when there is a known immediate critical life threat and when the value of quick action by the company officer outweighs the value of establishing command, or when a strategic incident commander arrives simultaneously and takes initial command.

SIZE-UP

28 The first arriving officer shall perform a size-up and establish command by transmitting an Initial Radio report that includes a command statement for all incidents where two or more units are investigating an incident or are actively engaged in operational tasks. Once Command is established, units that are en-route and on-scene shall coordinate and communicate any subsequent unit actions or observations through "Command". The size-up should include an assessment of the incident's critical factors. The critical factor categories include:

- Building Type
- Occupancy
- Arrangement
- Life safety
- Fire
- Resources
- Actions
- Special circumstances

OVERALL INCIDENT STRATEGY DETERMINATION

29 The incident's overall strategy must be determined prior to formulating the initial IAP. There are two distinct strategies; offensive and defensive. The two distinct strategic choices dictate in simple and understandable terms how close the emergency responders will get to the incident's hazard zone. NEVER combine offensive and defensive operations in the same fire area. This overall strategy will then serve as the basis for formulating the Incident Action Plan (IAP), which is the next step. Safety is the number one priority for both civilians

and responders, and effective safety practices begin by being in the right overall risk management strategy, either Offensive or Defensive. Which strategy is chosen depends on the incident's size-up assessment and critical factors weighed against the following Departmental **Incident Risk Management Plan**:

- We will risk a lot, in a calculated manner, to save savable lives.
  - If there is a possibility that there are savable lives inside a structure, and it is reasonably safe to conduct offensive interior firefighting, the offensive strategy is appropriate. If fire conditions indicate that the interior of the structure is not survivable or that interior firefighting would not be reasonably safe, interior firefighting is not an option, and the defensive strategy is required.
- We will risk a little, in a highly calculated manner, to save savable property.
  - We will risk a little in a highly calculated manner to save savable property. If civilian life safety is not a critical incident factor, and it is reasonably safe for firefighters to conduct offensive interior firefighting, a carefully calculated lower risk offensive strategy is appropriate.
- We will not take any risk at all to attempt to save what is already lost.
  - If fire conditions indicate that the interior of the structure is not survivable, or that interior firefighting would not be reasonably safe, interior firefighting is not an option. The defensive strategy is required.

Ongoing Assessment, Management, and Reassessment of Risk

30 All officers and firefighters shall continually assess the incident's existing and developing critical factors and the risk versus benefit associated with ongoing operations. The IC, all supervisors, and all firefighters MUST:

- Ensure that a Risk Assessment of personnel has been completed. If personnel are operating in an IDLH, they shall do so under the protection of a charged hose line.

- Ensure that a charged hose line is available on every floor where operations are taking place and fire spread is possible, and when opening overhead void spaces to check for fire travel and extension.

- Recognize indicators of fire location, travel, development, and behavior. Indicators can include visible fire, smoke color, smoke velocity, smoke density, and heat detected by thermal imager. Be particularly alert for extreme fire behavior.

- Recognize the potential impact of windy conditions on fire behavior and implement appropriate tactics to mitigate the potential hazards of wind-driven fire. Identify the expected flow path for fire development EARLY, based on the structure, any existing openings, and air flow direction and velocity.

- Recognize the difference between "tactical ventilation" and "non-tactical ventilation", and recognize the potential impact of both on fire development. Ensure companies take substantial efforts to eliminate or reduce unintentional non-tactical ventilation, and effectively apply ventilation and fire control tactics in a well communicated and well coordinated manner.

- Quickly identify and react to safety "Red Flags", because they can end up injuring or killing us. Officers must always take a pessimistic approach when sizing-up, assuming the worst until determining otherwise. A red flag will not necessarily change the overall incident strategy or incident action plan, but it must be identified and addressed by the IC and the rest of the hazard zone team:

    - Fire in the attic space
    - Fire in a basement
    - Operating above a fire (basements, floor above the fire)
    - Zero visibility
    - Encountering high heat
    - Reports of, "We can't find the fire"
    - Reports that state "fire under control," but you can still see active fire conditions from the command post
    - Victims discovered
    - Wind-driven fires
    - Smoke or fire showing from cracks in walls

- Reinforcing fire attack position more than once

31 Once the overall incident strategy is established, tactical priorities and the Initial Action Plan can be formulated. If the overall incident strategy changes, the IAP will also change and a structured process be used to communicate the change to all operating units. Incident size-up is an ongoing process.

THE INCIDENT ACTION PLAN: ESTABLISHING TACTICAL PRIORITIES

32 The IC must ensure that an adequate initial size-up of the incident scene has occurred, that the incident's critical factors have been identified, and that an overall strategy decision has been made and communicated PRIOR to formulating an initial IAP or beginning interior firefighting operations. Additionally, it is crucial that both the initial IC and the strategic IC (who will be assuming command in a command vehicle) *continually* reassess these things and *continually* evaluate the risk versus benefit of all tasks to be accomplished on every incident.

33 Always establish an action plan that is consistent with the overall incident strategy.

- Offensive and defensive operations shall never be simultaneously undertaken in the same fire area.
- Offensive operations are conducted inside a hazard zone.
  - Rescue
  - Fire control
    - Expect the "fire under control" benchmark within ten minutes of fire department arrival. If not achieved, revise overall strategy and IAP accordingly.
    - Re-evaluate overall incident strategy every five minutes.
    - The IC must verbally acknowledge each 15 minute notification from emergency dispatchers at Howard County's Public Safety Answering Point (Howard Communications) by re-announcing the incident's strategy over the assigned tactical radio frequency until the incident is placed under

control, or until command requests to discontinue or restructure the notifications.
    - Property conservation
    - Customer stabilization
- Defensive operations are NEVER conducted inside the hazard zone, but are conducted near the hazard zone – in safe locations.
    - Ensure firefighter safety
    - Define the hazard zone (including collapse zones)
    - Establish cut-offs
    - Search exposures
    - Protect exposures (preferably with master streams)
- The announcement of a change to a defensive strategy shall be made as follows:
    - The IC shall request that Howard Communications broadcast the Emergency Tone
    - The IC shall transmit to all hazard zone units *"Shifting to the defensive strategy. All units Exit (or Abandon, as appropriate) the structure. All units report PAR's upon exit."*
        - "Exit" the structure will be defined as an orderly withdrawal where interior lines and equipment will be withdrawn and repositioned when changing to a defensive strategy.
        - "Abandon" the structure will be defined as an emergency retreat where all hose lines and heavy equipment will be left in place and all operational personnel in the hazard zone will exit the structure as quickly and as safely as possible.
    - Howard Communications shall transmit the Emergency Tone again and repeat of the IC's statement verbatim.
    - A PAR shall be obtained for all units exiting the hazard zone after any switch from an offensive to a defensive strategy. Command's greatest priority once a strategic shift has been initiated is the safe exit of all units located in the hazard zone. Level One staged units and other units working outside the hazard zone shall maintain radio silence until all PAR's have been tallied (unless they have emergency or high priority traffic). Company officers shall account for their crews and advise their division or group officer or Command as to the status of

their crew upon exiting. Division and group officers shall notify Command of the status of the individual crews assigned to them upon their exit.

34 Operational considerations for structures include:

- Hazard Verification
  - Investigate to verify the exact location, nature, and extent of the hazard, including the specific location, fire floor, and the extent of fire extension.
- Occupant Control
  - Protect, remove, and provide care to endangered customers
    - Consider most effective method (evacuation or protection in place)
  - Primary search to obtain **"Primary all clear"** benchmark
  - Secondary search to obtain **"Secondary all clear"** benchmark
  - Provide short-term customer service to affected parties once hazard is mitigated
- Fire Control
  - Initial actions must include confining and putting water on the fire as early as possible by a fast, strong, well-placed attack in support of fire control and search operations.
  - **"Fire under control"** benchmark
  - **"Fire out"** benchmark
  - All operational personnel in the hazard zone shall work under the protection of a charged hose line
  - Take active measures to control unintentional non-tactical ventilation
  - Take early actions to establish uninterrupted water supply
  - Control utilities and building systems (gas, electric, HVAC ventilation systems)
  - Once the fire is extinguished, objective is to salvage, ventilate and overhaul so that incident conditions have ceased causing damage

35 Operational personnel assigned to areas where Immediate Dangerous to Life and Health (IDLH) conditions may be or rapidly become present will be in appropriate protective equipment at all times. This equipment shall include full PPE and donned SCBA. Tactical and task level supervisors are responsible for the air management for their assigned crew or crews. Air supply shall be sufficient to exit the IDLH prior to the low air alarm sounding.

ESTABLISHING COMMAND

36 The final things accomplished by the Initial Radio Report are the establishment of command and requesting further resources. The initial IC should provide a name for the command, communicate the mode of the command, identify the location of the accountability resource, and request further resources when appropriate.

37 There are three Modes of Command that can be assumed: Investigation, Tactical Command, or Strategic Command.

- **Investigation**: No hazard zone identified, IC is mobile and investigating.
- **Tactical Command**: IC is a company officer that is mobile near the hazard zone and monitoring a portable radio. The officer is not expected to have a Command Aid or manage a tactical worksheet. An exterior command position is being maintained and the IC is NOT committed in an IDLH or potentially rapidly evolving atmosphere. A transition to a Strategic Command is anticipated within five to seven minutes.
- **Strategic Command**: IC is a Chief or command level officer, and is stationary inside of vehicle designated as a Command Post. Within the Command Post it is expected that the IC and their Command Aid are actively managing a tactical worksheet, recording position and function of all assigned resources, assuring the IAP aligns with the critical incident factors, and monitoring radio transmissions closely in a noise and distraction-free environment preferably using a headset. A senior officer may be present advising and verifying that enough resources are assigned to the incident, that the overall incident strategy and IAP are current and in-line with forecasted incident conditions, confirming the incident organization chart matches the size and complexity of the incident, and managing the Command Post.

38 Once the Initial Radio Report is transmitted by the IC, the IC shall conduct or ensure a 360 degree assessment of the structure is that utilizes a thermal imager is quickly completed.

Once that information is available, the IC shall transmit an **Initial Radio Report Follow-Up** report that includes:

- Results of the 360 assessment
  - Number of stories in the rear
  - Basement type
  - Basement condition
  - Changes to problem identification
  - Changes to IAP
- Confirmation of the overall incident strategy
- Confirmation of the location of PAT tag accountability collection

TRANSITION OF COMMAND TO A STRATEGIC COMMAND POST

39 A Command Transition shall occur upon arrival of the first Chief or command officer, who will respond directly to the scene. If an active hazard zone still exists, or if there are still tactical benchmarks to coordinate, a command transition in accordance with Incident Command System General Order # 300.07 shall occur establishing the Chief or command officer as the Strategic IC. The Chief or command officer's Command Transition Report shall include the following:

- Perform size-up of incident's critical factors
  - Verify overall incident strategy is appropriate
  - Verify that current operating positions match the current incident conditions.
- Transmit that your unit is on-scene
  - "Battalion 1 on-scene"
- Contact the initial IC and transmit that you'll be transferring command:
  - "Taking it from out here".
- Confirm all hazard zone operating positions and their objectives with the initial IC, communicating face to face if possible.
- Advise Howard Communications that command is transferring
- Re-announce the current overall incident strategy

- Make a resource determination and request

40 The IC should actively request and receive ongoing **Unit Status Reports** from the units (or their division or group supervisors) that have been assigned tasks in the hazard zone. When reporting status, units should report the ***conditions*** they have, the ***actions*** they have taken, and their ***needs*** for additional resources or actions of others, and end the report with their PAR status.

41 ICs should assign division and group supervisors as needed to maintain an effective span of control.

- Division and group supervisors should remain exterior to the structure.
- Their ability to clearly and effectively communicate is imperative. Therefore, they should not be in a location that requires them to wear breathing apparatus.
- Division and group supervisors should be given responsibility for a specific geographic area if at all possible.
- When possible, division and group supervisors should be positioned at a point of entry to the structure. Once assigned there, all units that enter the structure by way of a point where there is a division supervisor assigned shall be assigned to a division supervisor. In turn, that division supervisor shall then be responsible to manage the accountability, air management, and work-rest cycles for all units assigned, including effective rotation of their crews and the On-Deck resources required to do so.
    - The division or group supervisor's management of assigned unit's air supply in no way diminishes the individual member's responsibility to manage their own air supply, or the company officer's responsibility for managing his/her crew's air supply.
    - The rule of thumb for managing the work-rest cycle of a Hazard Zone unit is to contact that unit about two minutes before they have reached their estimated air safety margin and remind them they are getting close to their work cycle ending, and they will need to exit the Hazard Zone soon.
- Crews that are rotated out of a hazard zone can be either Recycled or re-assigned to an established Rehabilitation area, at the discretion of their division supervisor or Command. Company officers and division and group officers are responsible to monitor the welfare of their personnel at all times. Companies exiting the Hazard Zone shall perform a face-

to-face with the division or group officer that shall include a report of the physical condition of their crew.

- **Recycled** implies that the crew does not need time for rehabilitation and/or medical monitoring. Usually these recycle activities are limited to changing air cylinders and hydration of personnel. If the company is able to recycle, they will retain their assignment to the division or group. During Level 3 Accountability, the division or group supervisor shall retain the unit's PAT tags on their accountability board and note the company is recycling.
- If the company is sent to an established Rehabilitation Division, they will be assigned to that division until they are released and ready to return to incident operations. *"Division Charlie to Command, I'm sending E-22 to Rehab and I need another engine company to replace them".*

RESOURCE DEPLOYMENT MODEL FOR ARRIVING COMPANIES

42 Unless directed otherwise by Incident Command, this order assigns specific tasks to companies based upon their order of arrival. Companies are expected to complete the listed responsibilities based upon their position in the arrival sequence, but should remain alert to being directed to different tasks and responsibilities by Incident Command, once it is established. Both the initial and subsequent incident commanders have full authority to direct resources to the priorities which they identify upon size-up and throughout incident progression.

Companies responding from an "out of position" location shall notify the highest ranking responding officer (e.g. a responding BC) or the Incident Commander if command has been established.

The initial arriving company officer is permitted flexibility to successfully stabilize the incident. When the initial arriving company officer is in command and changes assigned company responsibilities from those outlined in this order, specific objectives must be assigned to arriving units, and each must be advised and acknowledged through radio communications or face-to-face interaction between supervisors.

The process of control and accountability of each unit member is of extreme importance. This is a function of not only the Incident Commander, but is a responsibility of all officers, operational personnel, and group or division supervisors.

First Arriving Engine Company:

- Communicate that you are the 1st arriving engine.
- Make provisions for water supply by laying supply line and communicating the address of the layout, or split lay, etc. or securing your own water supply (30' maximum, 4" or larger "soft-sleeve" or "short-shot" supply line for securing your own water supply)
- Take a position to best accomplish incident objectives. Normally, this will be on side Alpha (street side front).
- Transmit Initial Radio Report (On scene report: Size of structure, Stories, Occupancy Type, Conditions Observed, Tactical Objective, Strategic Mode, Accountability Location, Establish and Name Command) if not already established.
- Assure the 360 degree survey of the structure is complete or assigned.
- Initiate fire control from a position that best protects occupants.
- If there is a possibility/confirmation that the fire is in the basement as you may see completing the 360, DO NOT advance down the interior stairs. If basement access can be obtained from the exterior, relocate the initial attack line to the basement for fire control and communicate the updated attack location over the radio. Protect the first floor if possible by closing the basement stair door and relocate to a position that is not in the structure on a floor above a working fire, or in line with likely heat and smoke ventilation pathways. Communicate your findings over the radio so that Command can assign companies accordingly.
- Position apparatus to assure access for other responding apparatus as much as possible.

Second Arriving Engine Company

- Communicate that you are the 2nd arriving engine.
- Unless otherwise advised, initial responsibility is to ensure the water supply for the first arriving engine company.
- In instances where the first arriving engine has secured their own water supply, the second arriving engine shall be placed in a position to stand-by/pump the initial hydrant to assure continuous water supply to the first arriving engine.
- If command has been passed from the first arriving unit, the Company Officer shall establish command and assume the role of Incident Commander until relieved by a command officer who has arrived on the scene. A transition of information and transfer of command should take place. This may be face to face or over the radio depending on type and complexity of information to be exchanged.
- Ensure an IRIC is in place; if not, provide the Initial RIC function.
- Ensure that the initial attack hose line from the 1st arriving engine has been advanced to the fire area and is capable of confining, controlling, and extinguishing the fire. This includes, but is not limited to, removing hose kinks, feeding more attack hose line, or making up staffing for the 1st arriving engine crew. Advance an attack hose line to back up the first arriving engine company.
- If the structure is two stories or more, advance an attack hose line via the interior stairs to confine, control, and/or extinguish vertical fire extension on the floor or area above the fire, assure the first attack line has control of the fire your company will be working above before advancing. If the fire is on the top floor, this hose line should be stretched to the attic/cockloft area of the structure.
- Position apparatus to assure access for other units as much as possible.

Third Arriving Engine Company

- Communicate that you are the 3rd arriving engine.

- Unless otherwise advised, make provisions for a secondary water supply by laying a supply line and transmitting the address of the layout (or split lay, etc.), or secure your own water supply (implies you have your own hydrant with 30' maximum of 4" or larger short-shot supply line hooked directly to the hydrant).

- Company shall stretch an attack hose line from the apparatus to the opposite side of the first engine, usually side Charlie. If not already accomplished, the officer shall transmit an updated status report that shall include:

    - Number of floors on side Charlie.
    - Number of levels below grade, access and conditions observed.
    - Any rescue problems.
    - Any needs or other information that might need tactical consideration.

- The attack hose line from the 3rd arriving engine shall be deployed and coordinated with the Incident Commander to the area or floor that is the most probable point of fire extension. This can be accomplished by using portable ladders if needed to keep the stairwell from being congested.

- If the basement is on fire or smoke is present in the basement, coordinate with first arriving companies and Incident Command before attacking the fire. Upon confirmation that companies are in a safe position, initiate fire confinement and attack control from a position that best protects occupants by proper placement of hose lines.

- Position apparatus to assure access for other units as much as possible.

Fourth Arriving Engine Company

- Communicate that you are the 4th arriving engine.

- Unless otherwise advised, augment the Initial RIC crew and establish a Rapid Intervention Crew and assemble the necessary tools and equipment.
- Position close to the scene, but assure access for other units if possible.

Fifth Arriving Engine Company
(Unit usually part of the supplemental Working Fire Assignment dispatch)

- Communicate that you are the 5th arriving engine.
- Unless otherwise advised,
- Ensure the water supply for the 3rd arriving engine company.
- In instances where the 3rd arriving engine has secured their own water supply, take a position to provide additional water supply if needed.
- If needed, assist the 3rd arriving engine in the placement and advancement of their attack line.
- Any attack hose lines from the 5th arriving engine shall be deployed and coordinated with the IC to the area, floor or exposure structure that is the most probable point of fire extension.
- Position close to the scene, but assure access for other units if possible.

First Arriving Special Service

- Communicate that you are 1st arriving Special Service.

- On scene report if 1st arriving: Size of structure, Stories, Occupancy Type, Conditions Observed, Tactical Objective, Strategic Mode, Accountability Location, Establish and Name Command if not already established.

- Unless otherwise advised, Apparatus will take a position on the same side as the 1st arriving Engine Company, normally Side Alpha considering the following:

    - Rescue
    - Tactical Ventilation (**tactical ventilation shall only take place if IC requested.)**
    - Exposures / Defensive Operations
    - Confinement / Extinguishment
    - If you are non-aerial, assure access for aerial apparatus and other units as much as possible.

- Work in minimum two-person teams, at least one member of each team must have a radio.

- The company's primary responsibility is Search and Rescue accomplished by forcible entry, ladders, well and coordinated ventilation and fire confinement/extinguishment.

- Secondary responsibilities are salvage and overhaul.

Second Arriving Special Service

- Communicate that you are 2nd arriving Special Service.

- Unless otherwise advised, If you are the 1st arriving aerial, apparatus is to position on the same side as the 1st arriving engine.

- If you are the 2nd arriving aerial, position on the opposite side of 1st arriving aerial, usually side Charlie. The crew is to report to the opposite side of the first arriving special service.

- Work in minimum two-person teams, at least one member of each team must have a radio.

- The company's primary responsibility is search and rescue accomplished by forcible entry, ladders well coordinated ventilation, fire confinement/extinguishment and ground ladder deployment to support operations and allow for egress to side Charlie.

- Secondary responsibilities are to verify the utilities are secure, salvage and overhaul.

- Position close to the scene, but assure access for other units if possible.

Third Arriving Special Service

- Communicate that you are 3rd arriving Special.

- Unless otherwise advised, If you are the 1st arriving Aerial, apparatus is to position on the same side as the 1st arriving engine.

- If you are the 2nd arriving Aerial, position on the opposite side of 1st arriving Aerial, usually side Charlie.

- The primary responsibility is to establish or support the Rapid Intervention Crew and assemble the necessary tools and equipment. This may include the Initial RIC and/or an assigned RIC engine, in accordance with the RIC General Order.

- Apparatus will be located close to the scene, yet position apparatus to assure access for other responding units as much as possible.

First Arriving EMS Transport Unit

- Unless otherwise advised, position close to the scene, allow for rapid transport to a hospital, but assure access for other units if possible.

- Crew will report in full gear and assume the Initial Rapid Intervention Crew (Initial RIC), formerly "two out".

- If operational personnel are **not** authorized as Firefighters:
  - Report status as "EMS Only" on the initial response and upon arrival at the incident.
  - Upon arrival, report to Incident Command for assignment.

- If not required for Initial RIC or RIC, crew should be prepared to provide EMS assistance for victims or fire personnel.

Second Arriving EMS Transport Unit

- Unless otherwise advised, position close to the scene, allow for rapid transport to a hospital, but assure access for other units if possible.

- Work with 1st arriving EMS unit to carry out EMS responsibilities.

- If not required for patient care, crew should assume the function of Medical Unit Leader and set up for responder rehabilitation.

First Arriving Chief or Command Officer

- The command officer shall transmit an Initial Radio Report if not already completed.

- The command officer must exchange information and may assume command. This exchange of information may be face to face or over the radio depending on type and complexity of information to be exchanged. Command shall be transferred by transmitting a Command Transition Report. The command post will normally be located at the command officer's vehicle, in what becomes the Strategic Command Post.

Additional arriving units

- Report to incident scene, Level 1 stage, or report to Level 2 staging as assigned by Incident Command.

REFERENCES

General Order 300.02 Accountability
General Order 300.04 Mayday
General Order 300.07 Incident Command System
General Order 300.11 Rapid Intervention Crew
General Order 410.01 Communications
ESB Threat Plan: Limited Water Supply

FORMS/ATTACHMENTS

None

Approved:

John S. Butler
Deputy Fire Chief

General Order 320.08: Medical Duty Officer

DEPARTMENT OF FIRE AND RESCUE SERVICES

GENERAL ORDER
320.08

Originating From	Issue Date	Revision Date	Attachments
Emergency Medical Services	**1/20/1995**	**1/5/2009**	**N/A**

SUBJECT: Medical Duty Officer
APPLICABILITY: All Personnel

POLICY:

This order establishes the standard operating procedure for the Howard County Department of Fire and Rescue Services (DFRS) Medical Duty Officer (MDO). This order shall be used as a guide to provide daily operational supervision and quality assurance in all areas of Emergency Medical Services (EMS).

1 GENERAL

1.1 The radio designation for the MDOs will be EMS 1 in the 1st Battalion and EMS 2 in the 2nd Battalion.

1.2 EMS 1 will be staffed at the Battalion Chief (BC) Paramedic level.

1.2.1 A Captain Paramedic, who meets the eligibility requirements, may fill the position in the absence of a Battalion Chief.

1.2.2 If an eligible Captain Paramedic is not available, with the approval of the Deputy Chief of EMS/Training or his/her designee, a Captain Paramedic who does not necessarily meet the eligibility requirements of a Battalion Chief may be used.

1.2.3 EMS1 will handle all personnel issues.

1.2.4 EMS1 will handle all complaints from Howard County General Hospital.

1.3 EMS 2 will be staffed at the Captain or Lieutenant Paramedic level.

2 DUTIES AND RESPONSIBILITIES

2.1 Assures employee accountability and daily staffing at the advanced life support level.

2.1.1 The MDO will conduct the EMS portion of the performance evaluation for Advanced Life Support (ALS) providers assigned to their shift.

2.2 Provides field supervision and quality assurance on emergency incidents.

2.3 Provides emergency medical supervision, expertise, and is an additional resource to DFRS incident commanders.

2.4 Provides supervision and assistance for research and development in DFRS projects.

2.5 Conducts system audits to include: incident reporting, skills performance, unit response times, patient outcomes, and vehicle and equipment performance.

2.6 Completes special projects or tasks as assigned.

2.7 EMS 1 will be the immediate supervisor for the captain and lieutenant assigned to the EMS 2 position.

2.8 First line infectious disease/significant exposure notification and follow-up, to include written documentation.

2.9 Prompt forwarding of subpoenas/summons to DFRS personnel.

2.10 Interacts with Howard County General Hospital Emergency Department on a regular basis.

2.11 DFRS liaison with specified medical facilities providing administrative and technical assistance for medical facility transfers.

2.12 Facilitates alert status situations.

2.13 Provide field personnel with prompt patient feedback for patient(s) transported to specialty referral centers.

2.14 May function as a preceptor for new and existing ALS personnel, students of EMS programs, and/or those in need of remedial training, as identified by the EMS Section.

2.15 Responsible for reviewing ambulance and paramedic engine, tower, or squad readiness.

2.16 Assures the security of controlled substance boxes and the documentation of controlled substance and glucometer logs.

2.17 Participates in the design, evaluation, and specification of EMS equipment, products, and vehicles.

2.18 Initial contact and fact finding for EMS complaints, and forwarding them through the

appropriate chain-of-command.

2.19 Facilitate collection and filing of Medical Incident Reports (MIRs).

2.20 Review all MIRs for completeness and for quality assurance purposes.

2.21 Complete a daily activity log, describing the activities of the shift.

2.22 Conduct formal counseling sessions and institute disciplinary action, if necessary.

2.23 Identify and make recommendations for EMS training and recertification.

2.24 Follow up on patient information for the purpose of outcome based study and recognition for awards.

2.25 Interacts with the EMS Program Manager and the DFRS Medical Director.

2.26 Functions as the Incident Commander when and where appropriate.

3 QUALIFICATIONS

3.1 EMS 1

3.1.1 Career Battalion Chief Paramedic
3.1.2 Nationally Registered and State of Maryland Paramedic
3.1.3 Three years of continuous advanced life support experience.

3.2 EMS 2

3.2.1 Career Captain or Lieutenant Paramedic
3.2.2 Nationally Registered and State of Maryland Paramedic
3.2.3 Two years of continuous advanced life support experience.

4 CHAIN OF COMMAND

4.1 The Battalion Chief MDO shall be the ranking operational EMS officer and shall fall into the incident chain of command.

4.2 EMS care and management shall be the primary mission of the MDO.

5 EMERGENCY OPERATIONS

5.1 The MDO shall be dispatched on call types set forth by the DFRS and the EMS Section based on call volume and operational needs.

5.2 The MDO has the authority to respond on any incident.

5.3 During incidents involving rescue or fire, the MDO shall report to the incident commander for an assignment.

5.4 Assignments may include, but are not limited to:

5.4.1 Medical branch or group.
5.4.2 Triage.
5.4.3 Medical rehabilitation.
5.4.4 Medical communications.
5.4.5 Photo documentation.
5.4.6 Safety Officer.
5.4.7 Personnel Accountability Officer.
5.4.8 Provide supervision and technical assistance to the incident commander or personnel.
5.4.9 Incident Commander.

5.5 The MDO, when on location of an emergency medical incident, shall observe and supervise patient care provided by DFRS personnel and provide constructive feedback.

5.6 The MDO has the authority and shall intervene whenever improper or unsafe actions are observed.

6 STAFFING

6.1 For the purpose of filling the MDO position, the following order will apply:

6.1.1 EMS 1
6.1.1.1 MDO on duty.
6.1.1.2 On duty Battalion Chief Paramedic.
6.1.1.3 On duty Captain Paramedic, if eligible to act as a BC
6.1.1.4 Off duty Battalion Chief Paramedic.
6.1.1.5 Off duty Captain Paramedic, if eligible to act as a BC.
6.1.1.6 Off duty Captain Paramedic.

6.1.2 EMS 2

6.1.2.1 On duty EMS Captain Paramedic.
6.1.2.2 On duty EMS Lieutenant Paramedic.
6.1.2.3 On duty Captain Paramedic.
6.1.2.4 On duty Lieutenant Paramedic.
6.1.2.5 Off duty Captain Paramedic.
6.1.2.6 Off duty Lieutenant Paramedic.
6.1.2.7 Off duty Battalion Chief Paramedic.

Approved:

Joseph A. Herr
Fire Chief

General Order 410.01: Communications

DEPARTMENT OF FIRE AND RESCUE SERVICES

GENERAL ORDER

410.01

Originating From	Issue Date	Revision Date	Attachments
C.I.T.	12/20/1999	3/01/2005	A-N

SUBJECT: **Communications**

APPLICABILITY: This policy and procedure applies to the Howard County Department of Police, Information Technology Bureau, Communications Division, hereinafter referred to as Communications, – 911 call-taking and fire dispatch as they pertain to the Department of Fire and Rescue Services operations; and the Department of Fire and Rescue Services

POLICY:

The Howard County Department of Fire and Rescue Services (hereinafter referred to as the Department) will provide the standard of operation for Department radio communications.

Table of Contents

DEPARTMENT OF FIRE AND RESCUE SERVICES

GENERAL ORDER

410.01

1 GENERAL

1.1 All calls for service are to be considered emergency calls unless otherwise specified by Department policy.

1.2 Equipment usage addressed in this general order includes, but is not limited to, two-way radios – portables and mobiles, tone pagers, alpha-numeric pagers, and cell phones.

1.3 Department radio operator/dispatcher services are provided by Communications.

1.4 The radio identification of fire dispatch:

1.4.1 The Communication Center shall be referred to as "Howard" for internal communications.

1.4.2 The Communication Center shall be known as "Howard County" when communicating with another jurisdiction via the mutual aid channel (commonly known as FMARS).

1.5 The Howard County Department of Technology and Communications Services, Communications Services, oversees the technical operation of the radio system and radio equipment. Communications Services provides radio equipment and equipment maintenance services to the Department including, but not limited to, two-way radios – portables and mobiles, tone pagers, alpha-numeric pagers, and cell phones.

1.6 All Department communications equipment will be used in accordance with all applicable federal, state, County and Department policies.

1.7 The phonetic alphabet used by the Department is shown in Attachment A.

2 DEFINITIONS

2.1 Shared Crew – a status where two or more tactical units are typically in-service at the same time with sufficient staffing to only respond with one unit.

2.2 Tactical Unit

2.2.1 Term used to describe those types of units that are typically deployed to implement tactical objectives at a significant incident

2.3 Includes, but is not limited to, the following unit types: Engine, Rescue, Squad, Truck, Tower, Tanker, etc. CAD – Computer-Aided Dispatch System

2.4 Communications Center – the facility where 911 calls are received, and fire and police communication are coordinated.

2.5 Center Manager – a uniformed member of the Police Department responsible for the overall operation of the Communications Center.

2.6 Emergency Communications Supervisor (ECS) – the civilian employee responsible for coordinating the daily operational activities of the Communications Center.

2.7 Fire Dispatch – the area within the Communications Center where equipment and personnel are situated providing Department communications services.

2.8 Zone – a combination of channels. The grouping is designed to meet functional needs of the Department and/or users.

2.9 Fire Department Liaison – A Department officer, typically a captain or higher, assigned the responsibility of operational communications services between the Department and the Howard County Department of Police, Communications Division.

2.10 Shall – Indicates a mandatory requirement.

2.11 Should – Indicates a recommendation or that which is advised but not required.

2.12 Talk Group/Channel – a specific location within a particular zone. Each talk group has its own specific name (i.e. the normal dispatching channel in named FDP1, the channel used for releasing a Knox Box key is EMKX). A talk group or channel is typically referenced by its Zone and Number position (i.e. FDP1 is commonly referred to as Alpha 1, EMKX is commonly referred to as Alpha 8).

2.12.1 Note: The 800 MHz radio system within Howard County serves many different departments such as the Police Department, the Department of Public Works, etc. Each department will have an Alpha 1, Alpha 2, etc. which is designed to serve its communications needs. Personnel should be

aware that our Department's Alpha 1 is not the same as another county department's Alpha 1.

3 DOCUMENT CONVENTIONS

3.1 **Bold Underline** designates a dispatcher transmission or response

3.2 ***Bold Italics*** designates a field unit transmission or response

4 RECORDING OF TELEPHONE AND RADIO COMMUNICATIONS

4.1 Communications, in accordance with applicable laws and regulations, records all designated radio and telephone communications that go through the Communications Center.

4.1.1 All telephone conversations and radio transmission can potentially become public information under the Freedom of Information Act.

4.1.2 All internal requests for copies of recorded radio or telephone communications shall be directed to the Department's Deputy Chief of Communications, Information Technology and Training, or his or her designee, via the appropriate chain of command. Approved requests will be released by Communications to the Department's Deputy Chief of Communication, Information Technology and Training, or his or her designee.

4.1.3 At no time will information obtained for internal purposes be released to the public.

5 SCHEDULED ACTIVITIES FOR COMMUNICATIONS CENTER PERSONNEL

5.1 Morning Activities

5.1.1 The ECS shall assure a Department Daily Staffing Report has been received. This report should be delivered to Communications by 0800 hours by the Department. Typically a field battalion chief, or designee, will handle this task.

5.2 Daily Checks

5.2.1 The primary fire dispatcher in conjunction with the backup dispatcher shall, within a half hour of the start of each shift, assure the tasks shown in Attachment B, Daily Check Sheet, are accomplished. The completed sheet shall be submitted along with the ECS daily report.

5.3 Monthly Checks

5.3.1 All paper backup files shall be checked to assure they are complete.

5.3.1.1 The Department Liaison, or designee, shall be responsible for management of the monthly checks. These activities may be delegated.

5.3.1.2 Three backup files are located in Fire Dispatch and one is located at the ECS workstation.

5.3.1.3 Each backup shall contain current copies, as determined by comparing version dates on the bottom of the paper backup files with the date shown on the computer generated check sheet for the files shown in Attachment C.

5.3.1.4 Completed monthly check sheets shall be turned in to the Department Liaison.

6 STATION NUMBERING

6.1 Department fire stations are numbered as follows:

Station Number	Station Information
1	Elkridge Volunteer Fire Department 6275 Old Washington Road
2	Ellicott City Volunteer Fireman's Association – Montgomery Road 4150 Montgomery Road
3	West Friendship Volunteer Fireman's Association 12460 Frederick Road
4	Lisbon Volunteer Fire Company 1330 Route 94
5	Fifth District Volunteer Fire Department 5000 Signal Bell Lane
6	Savage Volunteer Fire Company 8925 Lincoln Street
7	Howard County Department of Fire and Rescue – Banneker Station 5818 Banneker Road
8	Ellicott City Volunteer Fireman's Association – Bethany Station 9601 Route 99
9	Howard County Department of Fire and Rescue – Long Reach Station 5950 Tamar Drive
10	Howard County Department of Fire and Rescue – Rivers Park Station 10155 Old Columbia Road
11	Howard County Department of Fire and Rescue – Scaggsville Station 11226 Scaggsville Road
17	Howard County Dept. of Fire and Rescue – Headquarters
18	Howard County Dept. of Fire and Rescue – Training Academy
19	Howard County Dept. of Fire and Rescue – Community Relations Unit

6.2 Special circumstances – incoming and outgoing mutual aid station numbering.

Station Number	Station Information
20	Johns Hopkins Applied Physics Laboratory Fire Department
50	Prince George's County Fire Department – Laurel VFD Station 10. Prince George's Station 10 is assigned this station number to avoid confusion with Howard County Station 10.
70	Howard County Station 6 units shall respond into Prince George's County as Station 70 units. See Attachment D – Prince George's County Response
71	Howard County Station 10 units shall respond into Prince George's County as Station 71 units. See Attachment D – Prince George's County Response
72	Howard County Station 11 units shall respond into Prince George's County as Station 72 units. See Attachment D – Prince George's County Response

7 APPARATUS AND STAFF IDENTIFICATION

7.1 All apparatus and staff identifiers are spoken using the unit prefix (Engine, Paramedic, Unit, etc.) and the assigned number as individual numbers.

7.1.1 Exceptions:

7.1.1.1 Any apparatus or staff identifier where the number component is three or more numbers shall be spoken in a format that assures the numeric identifier is clearly understood by all recipients.

7.1.1.1.1 When the number component contains a "0" in the ones and tens position, the "00" will be spoken as hundred as in Unit eighteen hundred.

7.1.1.1.2 When the number component has a "0" in the tens position, the "0" will be spoken as zero as in Engine one-zero-one or Unit seventeen-zero-two.

7.1.2 Examples:

7.1.2.1 Station 1 units – Engine one-one, Chief one, Chief one-A, Utility one, Utility one-A, Paramedic one-five

7.1.2.2 Station 10 units – Engine one-zero-one, Paramedic one-zero-five, Tower ten

7.1.2.3 Station 11 units – Engine one-eleven, Paramedic one-fifteen

7.1.2.4 Operations Bureau – Unit three, Unit three-zero-five, Unit three-hundred
7.1.2.5 Training Division – Unit eighteen-hundred, Unit eighteen-thirty-one

7.2 Station-based apparatus and personnel will be discreetly identified using the appropriate prefix plus an assigned number as shown in Attachment E.

7.2.1 When out-of-service apparatus is replaced by similar reserve apparatus or a similar unit from another station, the replacement apparatus will assume the identification of the out-of-service apparatus.
7.2.2 Communications will be advised of all unit changes.

7.3 Personnel assigned to Headquarters, the Training Division and other non-station-based assignments will be discreetly identified using the prefix "Unit" plus an assigned number as shown in Attachment F.

7.4 Exceptions to apparatus and staff radio identification guidelines as referenced above are shown in Attachment G.

7.5 Using Apparatus and Staff Identification with Portable and Mobile Radios

7.5.1 Staff personnel (Headquarters, Training Division, and other non-station based personnel) and volunteer chief officers will use their assigned identification no matter the unit from which they are operating except where they assume responsibilities within the Incident Command System (ICS).
7.5.2 The radio identifier for apparatus positions are defined as follows:

Function	Radio Identification	Portable ID
Company Officer	Apparatus Identifier (i.e., Engine seven-one)	"A" Portable
Riding Position Behind the Officer	Apparatus Identifier followed by 'B'. (i.e., Engine seven-one B)	"B" Portable
Riding Position Behind the Driver	Apparatus Identifier followed by 'C'. (i.e., Engine seven-one C)	"C" Portable
Driver/Operator	Apparatus Identifier followed by "Operator" (i.e., Engine seven-one Operator)	"D" Portable

7.5.2.1 When the original unit officer is assigned to a functional position within the Incident Command System, the individual who becomes the unit officer shall then assume the apparatus identifier, dropping the "B" or "C" designation as appropriate.

7.5.2.2 Portable IDs are used to enable fire dispatch personnel to identify a specific portable radio in the event of an emergency button activation as well as to aid in normal radio communications.

7.5.3 When providing additional portable radios to an incident of large magnitude (e.g., mass casualty, disaster, missing person search, etc.), the extra portables will be identified by a uniform numbering criteria established by the Incident Command System.

7.5.4 When a Department member is operating a vehicle normally assigned to a specific staff member the operator shall use the specific staff member's radio identification followed by the word "mobile" to indicate the operator is not the staff member.

7.5.4.1 Examples

7.5.4.1.1 ***Unit 4 mobile to Howard.***
7.5.4.1.2 ***Chief 1 mobile to Engine one-one***

7.6 Mutual Aid Use of Mobile and Portable Radios - When operating on another jurisdiction's radio system Department units will identify themselves as Howard County units by preceding their unit identification with the term "Howard County"

7.7 Relocating Portable and Mobile Radios - The 800 MHz radio system in Howard County, as in many surrounding jurisdictions, has the capability to determine exactly which radio is transmitting at any given time. This functionality is important to the communications process as well as to the safety of personnel.

7.7.1 Under no circumstances shall a mobile radio be moved from its assigned position.

7.7.2 Portable radios should not be moved from their assigned positions under normal circumstances.

7.7.2.1 A station officer, or an officer of higher rank, may approve the temporary reassignment (up to 3 hours) should the need arise. Fire dispatch shall be appraised of any moves of portable radio equipment.

7.7.2.2 Portable reassignments lasting greater than 3 hours shall require notification and approval of the appropriate battalion chief. The battalion chief shall inform both the Deputy Chief of Operations, and the Deputy Chief of Communications, Information Technology and Training as soon as practical.

7.7.3 The proper assigned position for a portable radio can be determined by the position marking on the antenna or the position information shown in the display. These two indicators of an assigned position shall match at all times.

8 JURISDICTIONS AND AGENCIES AUTHORIZED TO OPERATE ON DEPARTMENT TALK GROUPS

8.1 Attachment H shows those jurisdictions/agencies that are authorized to operate on Department talk groups and to which talk groups each of the jurisdictions/agencies have access.

9 CONDUCT AND OPERATION GUIDELINES FOR USE OF TWO-WAY RADIO EQUIPMENT

9.1 Professionalism - Personnel shall exhibit a courteous, conscientious, and generally business like manner at all times when operating on Howard County communications equipment.

9.1.1 If, at any time, one party to an exchange exhibits any unprofessional mannerisms, the other party shall not respond in kind.

9.2 Speaking Demeanor

9.2.1 Speak calmly, clearly, and distinctly exhibiting clarity of speech.
9.2.2 Keep a natural conversational tone. Shouting distorts the transmission, making comprehension difficult.
9.2.3 Speak steadily at medium speed. Do not hurry over seemly less important words as they may be important to the recipient.
9.2.4 All communications should be brief and to the point so as to not unnecessarily tie up the radio.

9.3 Exchanging Information

9.3.1 When initiating an exchange with another unit or fire dispatch, assure the other party is ready to receive your message.
9.3.2 The receiving party should repeat the calling unit's identity and acknowledge their readiness to receive a message.
9.3.3 Examples of the process of exchanging information.
9.3.3.1 ***Engine seven-one to Engine nine-one. Engine nine-one to Engine seven-one go ahead with your message.***
9.3.3.2 ***Paramedic two-five to Howard. Prepare to copy a phone number.*** **Howard to Paramedic two-five, go ahead with the phone number.**
9.3.4 The calling unit shall be responsible for assuring the intended recipient has received their message.

9.4 Initiating a Transmission - To transmit a message the user shall depress the transmit button and listen for a rapid series of tones.

9.4.1 If the tones are heard, the user may begin speaking when the tones have stopped.

9.4.2 If a user receives a honking tone upon depressing the transmit button, then the channel is busy. The radio system automatically places the user's radio in a queue and will notify the user when the channel is available. When the channel becomes available the radio will emit a rapid series tones. Once the tones have stopped the user may depress the transmit button and begin speaking.

9.5 Examples of acceptable radio communications are shown in Attachment I.

10 CONTACTING THE COMMUNICATIONS CENTER

10.1 Field personnel are not to call Communications Dispatchers and 911 Call-Takers. Specifically discouraged is calling on extension 2943 and 2944. The only two acceptable methods of contacting fire dispatch are via radio or by calling the ECS at extension 2950.

10.1.1 Radio contact should be used for normal operational communications.

10.1.1.1 Normal operational communications include such activities as incident response, unit status changes, logging on the air on a detail, placing a unit in-service or in reserve status, reporting dangerous or emergency situations, obtaining information for the police, and the like.

10.1.2 Phone contact should be reserved for significant issues.

10.1.2.1 Significant issues include discussing inappropriate radio traffic, obtaining or sharing information pertaining to appropriateness/inappropriateness of an assignment, and sharing information that needs to be kept secure or private.

10.1.2.2 These calls shall only be made to the ECS or Fire/Police Department Officer on-duty and shall only be made by a Station Officer or an officer of higher rank.

10.1.2.3 All issues requiring a phone call to the ECS shall be documented in the station logbook and the deputy chief of Operations, and Communications and Information Technology informed.

10.1.2.4 The appropriate Field Battalion Chief should be advised of the issues requiring Communications be called.

11 INCIDENT COMMUNICATIONS PRACTICES AND PROCEDURES

11.1 Time goals for dispatching of emergency incidents.

11.1.1 A new request for Department services shall be dispatched within 90 seconds of its receipt in the 911 Call-Taking Center or its receipt via mutual aid in fire dispatch.

11.1.1.1 This goal pertains to calls for service that are located within the County.

11.1.1.2 Occasional exceptions may be necessary. Examples include:

11.1.1.2.1 Handling a call for service involving criminal activity to assure adequate information is obtained and to assure the safety of response personnel.

11.1.1.2.2 Language barriers.

11.1.1.2.3 Exceptionally high call volume.

11.1.1.2.4 Unusual circumstances.

11.1.2 A request for assistance for Department services received via mutual aid shall be dispatched within 45 seconds of its acknowledgment by fire dispatch.

11.1.2.1 This goal is for calls for service that are located outside of Howard County. As the requesting jurisdiction will typically request a specific unit, the normal call processing tasks associated with entering and dispatching a new call for service should be minimal.

11.1.3 A request for additional assistance (task force, second alarm, additional ambulance, etc.) at the scene of an incident shall be dispatched within 45 seconds of its acknowledgment by fire dispatch.

11.1.3.1 This goal is for assistance at an existing incident, therefore the normal call processing tasks associated with entering a new event are not necessary.

11.2 Incident Alerting Procedure

11.2.1 Objectives of this alerting procedure

11.2.1.1 To minimize the call-received to on-scene time.

11.2.1.2 To provide response personnel adequate information to properly respond to the incident.

11.2.2 Standard Incident Alert

11.2.2.1 The alerting process shall consist of the following steps except where noted herein. Descriptions of the dispatch steps follow.

11.2.2.1.1 Step 1 - Initial Incident Alert

11.2.2.1.2 Step 2 - Station / Staff Tones

11.2.2.1.3 Step 3 - Fire Alert or Rescue Alert Tone

11.2.2.1.4 Step 4 - Full Incident Information Broadcast

11.2.2.1.5 Step 5 - Confirmation of Receipt of Alert by On-the-Air Units
11.2.2.1.6 Step 6 - Response of Units
11.2.2.1.7 Step 7 - Incident Information Rebroadcast
11.2.2.1.8 Step 8 - Additional Information

11.2.2.2 Step 1 - Initial Incident Alert

11.2.2.2.1 Communications shall precede **all** incident alerts with the Alert Tone and the keyword "Alerting".

11.2.2.2.2 The following information shall be provided in the Initial Incident Alert:

11.2.2.2.2.1 Alert Tone
11.2.2.2.2.2 "Alerting"
11.2.2.2.2.3 Incident alarm type - Incident alarm types are shown in Attachment J.
11.2.2.2.2.4 Box Area of the incident
11.2.2.2.2.5 Incident address or common place name (only one)
11.2.2.2.2.6 Response talk group

11.2.2.2.3 No additional information shall be given at this time unless it relates to responder safety.

11.2.2.2.4 When dispatching out-of-county units, fire dispatch will advise the respective county or counties to "Standby to Copy", then immediately dispatch the incident. The dispatch of an incident shall never be delayed while waiting for another jurisdiction to confirm the availability of their unit(s).

11.2.2.2.5 Examples:

11.2.2.2.5.1 **Alerting Medical Alarm seven-three Lorien Nursing Home, respond on Alpha 2**

11.2.2.2.5.2 **Alerting Rescue Alarm seventy-fifty-one Westbound Rt. 70 at Marriotsville Road, respond on Alpha 2**

11.2.2.2.5.3 **Alerting Medical Alarm one-four 1234 San Thomas Road, for a shooting, scene is not secure, respond on Alpha 2**

11.2.2.3 Step 2 - Station / Staff Tones

11.2.2.3.1 Communications shall alert stations in due order as recommended by CAD or as shown in the paper backup files.

11.2.2.3.2 Units not recommended for response but known to be in proximity to the incident shall be used in place of recommended units.

11.2.2.3.3 Communications personnel shall use the "Stacking" process, as opposed to the individual alerting of stations, at all times. Individually alerting stations typically adds time to the dispatch of equipment.

11.2.2.3.4 Only personnel in-station and those personnel using tone pagers (e.g. Motorola Minitors) are able to hear the station/staff alerting tones.

11.2.2.3.5 Units operating with 800 MHz radio equipment are **not** able to hear the station/staff alerting tones. **Personnel shall not initiate any non-urgent/non-emergency transmissions between the Initial Incident Alert and the Full Incident Information Broadcast.**

11.2.2.3.6 Fire dispatch shall always alert the first due station for a call in their area regardless of whether or not the first due station has a unit available to respond.

11.2.2.3.6.1 Regarding EMS calls. If the first due station does not have a unit to respond to an EMS call and the ALS/BLS ambulance is coming from a location further than the second, third, etc. due station, a unit from closer due station shall be dispatched in due order.

11.2.2.4 Step 3 - Fire Alert or Rescue Alert Tone

11.2.2.4.1 Communications shall send the fire or rescue alert tone as appropriate.

11.2.2.5 Step 4 - Full Incident Information Broadcast

11.2.2.5.1 The following information shall be provided in the Full Incident Information Broadcast:

11.2.2.5.1.1 Incident type

11.2.2.5.1.2 Box area

11.2.2.5.1.3 Street address and cross-street (major cross-street if possible) and common place name if available

11.2.2.5.1.4 Nature of the incident

11.2.2.5.1.5 Units assigned (in due order per CAD or backup run cards)

11.2.2.5.1.6 Map number

11.2.2.5.1.7 Response talk group

11.2.2.5.1.8 Time

11.2.2.5.2 During the Full Incident Information Broadcast fire dispatch shall identify those units that are on-the-air by stating "unit xx from the street" as part of the "units assigned" transmission. This does not apply to chief officers and staff personnel unless specific circumstances dictate that this is done.

11.2.2.5.3 Examples of dispatching an incident where all units are in-quarters:

11.2.2.5.3.1 **Rescue Alarm one-one: Route 1 and Montgomery Road; motor vehicle crash; Engine one-two, Rescue Squad one, Paramedic one-five due; respond on Alpha 2. 2130.**

11.2.2.5.3.2 **Box Alarm nine-one; ninety-five twelve Oakland Mills Road; fire in the bedroom; Engine nine-one, Engine seven-one, Engine six-one, Tower 7, Paramedic nine-five, Battalion One due; respond on Bravo one. 1510.**

11.2.2.5.4 Example of dispatching an incident where Engine seven-one and Paramedic seven-five are on-the-air:

11.2.2.5.4.1 **Box Alarm seven-one, ten thousand-three hundred Little Patuxent Parkway, fire in Bun Penny, Engine seven-one from the street, Engine nine-one, Engine two-two, Tower seven, Tower ten, Engine five-two, Paramedic seven-five from the street, Battalion Chief two due; respond on Delta one. 0301.**

11.2.2.6 Step 5 - Confirmation of Receipt of Alert by On-the-Air Units

11.2.2.6.1 Fire dispatch shall immediately confirm that any on-the-air unit dispatched on an incident received the call after the Full Incident Information Broadcast. This shall be accomplished by contacting each unit individually.

11.2.2.6.2 On-the-air units shall advise fire dispatch of their physical location when their location will likely change the due order of units so all responding units will be able to anticipate each other's arrival order.

11.2.2.6.3 Example:

11.2.2.6.3.1 **Engine seven-one, were you direct?** ***Engine seven-one is direct and responding with three personnel from Cedar Lane and Freetown Road.*** **Engine seven-one responding with three personnel. 1543.**

11.2.2.7 Step 6 - Response of Units

11.2.2.7.1 In-station units shall advise Communications they are responding once the crew is aboard and the vehicle begins its travel.

11.2.2.7.2 Units shall give their staffing number at time of response.

11.2.2.7.2.1 Ambulances should not give their staffing unless they have more or less than two personnel on board.

11.2.2.7.2.2 Examples:

11.2.2.7.2.2.1 ***Engine eight-two responding with 4 personnel.*** **Engine eight-two responding with 4 personnel, 1230.**

11.2.2.7.2.2.2 ***Ambulance three-six responding driver only.*** **Ambulance three-six responding driver only, 1230.**

11.2.2.7.3 Communications shall track unit staffing and shall advise the highest ranking responding officer of incident staffing.

11.2.2.7.4 Personnel shall advise fire dispatch their response will be delayed if they are unable to respond in a timely fashion, and shall not advise responding until the vehicle starts its travel. Delayed units shall provide fire dispatch the anticipated length of their delay.

11.2.2.7.4.1 Example:

11.2.2.7.4.1.1 ***Engine one-zero-one will have a delayed response of approximately five minutes.*** **Engine one-zero-one advising a delayed response of approximately five minutes. 1231.**

11.2.2.7.4.2 In the event a unit can not respond to an incident, for any reason, the unit shall immediately notify fire dispatch of their inability to respond. Fire dispatch shall immediately dispatch the next due unit.

11.2.2.7.5 Any unit that was not dispatched on the assignment but believe they are closer to the incident than a dispatched unit shall advise fire dispatch of their location and shall respond on the incident at this point in the alerting process.

11.2.2.7.5.1 Fire dispatch shall consult the appropriate unit/officer – as outlined in the Incident Command Authority section of this policy – for a disposition on the replaced unit.

11.2.2.7.5.2 This should be accomplished after all units have responded.

11.2.2.7.5.3 Typically the replaced unit should be placed in-service.

11.2.2.7.6 When a dispatched unit which has been replaced because of their late/delayed response becomes able to respond, the dispatcher will consult that unit and its replacement to determine their locations. Fire dispatch shall consult the appropriate unit/officer – as outlined in the Incident Command Authority section of this policy – for a disposition on one of the units.

11.2.2.7.6.1 Typically the further unit will be placed in-service.

11.2.2.7.6.2 The further due unit may place themselves in-service.

11.2.2.8 Step 7 - Incident Information Rebroadcast

11.2.2.8.1 The rebroadcast will be given on the assigned incident channel.

11.2.2.8.2 The following information shall be provided in the Incident Information Rebroadcast:

11.2.2.8.2.1 Units responding

11.2.2.8.2.2 Units alerted but not responding

11.2.2.8.2.3 Address with cross street (major cross street, if possible) and/or common place name

11.2.2.8.2.4 Nature

11.2.2.8.2.5 Map number

11.2.2.8.2.6 Any special information

11.2.2.8.2.7 Activity in progress

11.2.2.8.2.8 Staffing total of responding units
11.2.2.8.2.9 Hospital statuses
11.2.2.8.2.9.1 Shall be given when a local hospital is on an alert status. No hospital status should be given if all local hospitals are open.
11.2.2.8.2.10 Time
11.2.2.8.3 The rebroadcast of responding apparatus shall be transmitted in the due order as shown in CAD or on the backup run cards.
11.2.2.8.3.1 The only exception shall be that Communications personnel can break the rebroadcast into those units responding and those alerted but not responding. However, the units responding shall be read in due order.
11.2.2.8.4 Examples:
11.2.2.8.4.1 **Engine one-two, Squad one, Paramedic one-five responding; Rescue Alarm one-one, Route 1 and Montgomery Road for a personal vehicle crash, Refer to map 80-A, County Police on the scene. 1512.**
11.2.2.8.4.2 **Engine six-two, Squad one, Paramedic six-five responding, Paramedic nine-five alerted, Rescue Alarm six-three, Route 1 and Cedar Lane for a personal vehicle crash, Refer to map 80-A, County Police on the scene. 1012.**

11.2.2.9 Step 8 – Additional Information
11.2.2.9.1 All information received subsequent to the dispatch of an assignment shall be relayed to responding units.
11.2.2.9.1.1 When an assignment includes a chief officer or officer(s), additional information shall be directed to the officer(s).

11.2.3 Incident Alerting Other than the Initial Dispatch

11.2.3.1 Alerting Additional Units/Staff for an incident already in progress. – Additional Units, Task Forces, Upgrade of Assignments, Second Alarms, etc.
11.2.3.1.1 The Initial Incident Alert procedure shall be modified to include enough information to indicate to response personnel that additional units/staff are being assigned to an existing incident.
11.2.3.1.2 The phrases shown below shall be used as appropriate:
11.2.3.1.2.1 Additional Units – "additional units on"
11.2.3.1.2.2 Second Alarm – "the second alarm on"
11.2.3.1.2.3 Task Force – "the task force on"

11.2.3.1.3 The modified Initial Incident Alert process shall be as follows:

11.2.3.1.3.1 Alert Tone + "Alerting…" + modification information

11.2.3.1.3.2 The remainder of the alert shall follow the Standard Incident Alert procedure as previously outlined.

11.2.3.1.4 Examples

11.2.3.1.4.1 **Alerting the second alarm on Box Alarm eleven-five; ten-thousand three-hundred thirty-five Scaggsville Road. Respond on Charlie 6.**

11.2.3.1.4.2 **Alerting additional units on Rescue Alarm two-one; sixty-three forty-eight Main Street. Respond on Alpha 2.**

11.3 Working Fire Incident Task Force

11.3.1 Upon confirmation of a working incident, fire dispatch shall dispatch the task force.

11.3.1.1 If fire dispatch is unable to determine if the incident is a working fire from radio transmissions they shall contact the incident commander and request clarification.

11.3.1.2 If, during a working incident the task force is cancelled prior to dispatch by an on-scene officer, fire dispatch shall proceed to alert the following task force personnel as an advisory notification only.

11.3.1.2.1 Safety Officer (CAD: SAFETY), Battalion Chief (CAD: BC), EMS Officer (CAD: MDO), Public Information Officer (CAD: PIO)

11.3.1.2.1.1 **Information advisory for the task force Safety Officer, Battalion Chief, EMS Officer, and PIO. Units on the scene of a working structure fire at 5100 Long Look Lane. Units operating on Bravo 1. Task force cancelled prior to response. Information advisory only, no response necessary. 0031 hours.**

11.3.1.2.2 This advisory alert can not be cancelled except by a Department deputy chief or higher.

Incident Command Authority

11.3.2 Prior to arrival – The most senior responding officer is responsible for incident decision-making until the establishment of the incident command system (ICS) and an incident commander (IC) designated.

11.3.2.1 When there is no chief officer responding on the incident, the first due tactical unit is responsible for incident decision-making until the establishment of the incident command system (ICS) and an incident commander (IC) designated.

11.3.3 Once incident command has been established – All communications to and from units on the scene, units en route, and fire dispatch will be directed to the incident commander. The IC is responsible for incident decision-making.

11.4 Turnout Times

11.4.1 Stations 1, 2, 5, 6, 7, 8, 9, 10, 11 and 20

11.4.1.1 Fire dispatch shall allow 90 seconds for the first due tactical unit and an EMS unit to respond from that station. Additional tactical units and EMS units from the same station which have been alerted for the same incident shall have up to 5 minutes from initial alert to respond.

11.4.1.1.1 Station 7 and Station 10 shall have 90 seconds for each staffed tactical unit to respond. Both stations have staffing for all tactical units assigned.

11.4.1.1.1.1 Station 7 – Tactical units: Engine and Tower

11.4.1.1.1.2 Station 10 – Tactical units: Engine and Tower

11.4.1.2 If the units do not respond in the time allowed fire dispatch shall re-alert the station and attempt to contact the station by phone. If no response after an additional 30 seconds, and any response is deemed unlikely, fire dispatch shall promptly alert the next due.

11.4.1.2.1 Fire dispatch shall note in CAD that the unit or units failed to respond after alerting the next due unit or units.

11.4.2 Stations 3 and 4

11.4.2.1 Fire dispatch shall allow 90 seconds for a single unit – tactical or EMS – to respond from that station. Additional tactical units and EMS units from the same station which have been alerted for the same incident shall have up to 5 minutes from initial alert to respond.

11.4.2.2 If the units do not respond in the time allowed fire dispatch shall re-alert the station and attempt to contact the station by phone. If there is no response after an additional 30 seconds, and any response is deemed unlikely, fire dispatch shall promptly alert the next due.

11.4.2.2.1 Fire dispatch shall note in CAD that the unit or units failed to respond after alerting the next due unit or units.

11.4.3 Mutual Aid Units

11.4.3.1 Fire dispatch shall allow 180 seconds for a mutual aid company to respond.

11.4.3.2 If the unit has failed to respond after the allotted time, fire dispatch shall re-contact the mutual aid jurisdiction and ascertain the status of the mutual aid unit. If it is deemed unlikely that the unit will respond, fire dispatch shall promptly alert the next due.

11.4.3.2.1 Fire dispatch shall note in CAD that the unit or units failed to respond after alerting the next due unit or units.

11.4.4 Replacement of Units Which Have Failed to Respond

11.4.4.1 When units have arrived on the scene – Fire dispatch shall request permission to replace units that failed to respond from the highest ranking officer who is on the scene of the incident.

11.4.4.2 When no units have arrived on the scene – Fire dispatch shall promptly replace units that have failed to respond as indicated above without asking for permission from responding units.

11.5 Modification of Assignment/Alarm Level

11.5.1 Fire dispatch has the responsibility to dispatch the correct assignment based on fire department approved response criteria.

11.5.1.1 If, after dispatching an incident, fire dispatch receives information indicating an inadequate response has been alerted, fire dispatch shall promptly modify the assignment/alarm level to assure an appropriate response.

11.5.1.2 If, after dispatching an incident, fire dispatch receives information indicating the assignment is no longer necessary or should be reduced, fire dispatch shall consult the appropriate unit/officer – as outlined in the Incident Command Authority section of this policy – for permission to reduce or cancel the assignment.

11.5.2 The most senior responding officer may modify an assignment/alarm level as conditions warrant.

11.5.2.1 An assignment may be modified by a non-responding officer of the rank deputy chief or higher as deemed necessary by the officer. Responding units shall be advised of the modification.

11.5.2.2 An assignment may be modified by a Department officer assigned to work in the Communications Center. Responding units shall be advised of the modification.

11.5.3 On occasion the Department may modify apparatus response for defined periods of time. This will typically occur during periods of inclement weather.

11.5.3.1 The Department will advise the ECS of the modification(s) and the anticipated duration of the modification(s).

11.6 Talk Group Assignment and Usage

11.6.1 Department radio operations shall typically be conducted on Alpha 1 (FDP1) except as specified within this policy.

11.6.1.1 Starting May 1, 2005, Department radio operations shall be conducted utilizing two talk groups between the hours of 0700 and 1900, Monday through Friday, as Fire Dispatch staffing conditions permit.

11.6.1.1.1 Prior to initiating two talk group operations, the following notifications shall be accomplished. Information shall include the start and stop time of two talk group operations.

11.6.1.1.1.1 Each station will be notified by station printer.

11.6.1.1.1.2 Battalion Chief 1, Battalion Chief 2, EMS 1 will be notified by phone.

11.6.1.1.1.3 An informational message will be broadcast announcing the start of two talk group operations and the anticipated end time.

11.6.1.1.2 Two talk group operations shall be conducted as follows

11.6.1.1.2.1 Alpha 1 (FDP1) – This channel shall be used for all normal non-incident related radio communications and incident alerting.

11.6.1.1.2.2 Alpha 2 (OPS1) – This channel shall be used for all incident communications except as outlined in this policy.

11.6.1.2 Department personnel and fire dispatch personnel may request the use of talk groups as needed to conduct business.

11.6.2 When units are directed to respond and operate on a channel other than Alpha 1 they shall continue to operate on that channel until otherwise directed or until they are in-service. Units going in-service shall advise fire dispatch of their in-service status on the incident channel in use and then switch back to Alpha 1.

11.6.2.1 If incident conditions are such that having multiple units advising they are in-service will interrupt *critical* incident operations, the incident commander may direct that the in-service units advise their status information on Alpha 1. *This should be an infrequent occurrence.*

11.6.3 Circumstances requiring use of other talk groups.

11.6.3.1 Full box assignments or other major incidents where a battalion chief has been assigned – **units will be dispatched on Alpha 1 (FDP1) and be directed to respond and operate on a talk group in an incident zone**. Incident zones are Bravo, Charlie or Delta, which will be assigned on first available basis. The talk group for the initial response will be the first channel in the zone assigned (i.e. Bravo 1, Charlie 1, Delta 1).

11.6.3.1.1 When a full box assignment is dispatched and moved to an incident zone, a fire dispatcher shall be assigned to the incident. The assigned incident dispatcher shall not be required to perform any activities that are not related to the incident.

11.6.3.1.1.1 The ECS shall make an effort to supply an additional dispatcher to the fire dispatch area to assist with normal Department activities during the incident.

11.6.3.2 Heavy radio traffic as the result of numerous non-full box assignment incidents – fire dispatch can move units to other talk groups to facilitate radio communications as necessary. Typically this should be Alpha 3 (OPS2)

11.6.3.3 Significant events such as hurricanes, blizzards, etc. where a significant increase in workload and radio traffic is anticipated – the Department, in cooperation with Howard County Police Department, Bureau of Communications, will develop a talk group usage plan to accommodate anticipated needs.

11.6.4 Additional units being dispatched to an incident already operating in Bravo, Charlie or Delta zone shall be dispatched on Alpha 1 (FDP1) and advised to respond and operate on the appropriate staging channel. Channel 6 is the pre-designated staging channel in Bravo, Charlie, and Delta zones. Example: an incident operating in the Charlie Zone would have Charlie 6 as its staging channel.

11.6.4.1 Communications shall advise the incident commander that additional units are being assigned to the staging channel.

11.6.4.1.1 The incident commander may request units be placed on the active incident channel on dispatch.

11.6.4.2 Fire dispatch shall monitor the staging channel for the response of dispatched units, their arrival on the scene and any other radio traffic that may be directed to fire dispatch.

11.6.4.2.1 Once a staging officer is assigned by the incident commander, fire dispatch will only monitor the staging channel for unit response and arrival. All communications should go through the staging officer.

11.6.4.3 Fire dispatch shall advise the incident commander of all units dispatched and assigned to the staging channel. This should be accomplished in a single transmission to the incident commander.

11.6.4.4 The incident commander can either switch to the staging channel to assign tasks to the additional units or go through fire dispatch to make assignments.

11.6.4.5 Responding units should use a separate radio to monitor incident communications so as to be informed of incident activities.

11.6.5 The highest ranking responding officer or incident commander has the authority to request the use of any available talk group to meet incident needs.

11.6.6 Mutual Aid Talk Group Usage

11.6.6.1 Incoming Mutual Aid

11.6.6.1.1 Fire dispatch shall assign the appropriate incident talk group to units responding into Howard County.

11.6.6.2 Outgoing Mutual Aid

11.6.6.2.1 Fire dispatch shall request the incident channel from the requesting jurisdiction if it is not provided. This information shall be given to responding Department units.

11.6.6.2.2 After advising fire dispatch of their response, Department units assigned to a mutual aid talk group shall switch and operate on that talk group until released by the requesting jurisdiction.

11.6.6.2.2.1 While operating on the mutual aid talk group, units shall provide the mutual aid jurisdiction all statuses such as en route, on location, and the like.

11.6.7 Attachment K shows the zones the associated talk groups available to the Department and Attachment L shows the radio templates used in Department radios.

11.6.7.1 Fire dispatch personnel shall understand all County zones and talk groups used by the Department and should be familiar the radio templates as this knowledge may be useful when handling communications issues.

11.6.7.2 Department personnel shall understand the radio zones, talk groups and templates used by the Department.

11.7 Unit and Incident Statuses

11.7.1 Unit Statuses

11.7.1.1 Department personnel are responsible for providing, and fire dispatch personnel are responsible for recording in CAD, the following unit statuses as they relate to incident activities. Timely entry into CAD is important as the Department uses this information in analyzing its performance. Comments should be entered into CAD when appropriate.

11.7.1.1.1 Responding/En Route

11.7.1.1.2 On the scene

11.7.1.1.3 At patient side

11.7.1.1.4 Available on the scene

11.7.1.1.5 Transporting to the hospital
11.7.1.1.6 At the hospital
11.7.1.1.7 In-service returning
11.7.1.1.8 Out-of-service returning
11.7.1.1.9 In-quarters

11.7.1.2 When a unit is not placed in a status of which fire dispatch was advised within sixty (60) seconds it shall be considered a late entry.

11.7.1.2.1 When this situation occurs, fire dispatch personnel shall properly set the unit's status, enter a comment into CAD advising the status was set late and the approximate elapsed time.

11.7.1.2.2 Other information shall be entered as needed to appropriately document the late status change.

11.7.1.3 When an incident is placed on an incident talk group other than Alpha 1(FDP1) on the initial alert, fire dispatch shall advise the response status of those units on Alpha 1. Response status shall include a listing of those units that have been alerted and have not responded, and the talk group being used.

11.7.1.3.1 Example

11.7.1.3.1.1 **Box Alarm 7-1, Columbia Mall, all units responding except Engine two-one and Tower ten. Units operating on Charlie 1. 1530.**

11.7.2 Incident Statuses

11.7.2.1 Incident command should provide fire dispatch with incident statuses as dictated by Department policy.

11.7.2.1.1 Statuses should include, but are not limited to, the following:

11.7.2.1.1.1 Initial status report

11.7.2.1.1.1.1 Occurs on the arrival of the first unit.

11.7.2.1.1.2 Secondary status report(s)

11.7.2.1.1.2.1 Occurs approximately five (5) minutes after the establishment of incident command.

11.7.2.1.1.2.1.1 If the incident commander has not provided a secondary status report after five (5) minutes, fire dispatch should request a status update.

11.7.2.1.1.2.2 Following the updated status report, fire dispatch should determine from Incident Command if they need any support services (e.g., Fire Investigator, Building Inspector, Gas and Electric, Canteen, etc.)

11.7.2.1.1.3 Progress Report(s)

11.7.2.1.1.3.1 Occur approximately fifteen (15) minutes after the arrival of the first unit.

11.7.2.1.1.3.2 If the incident commander has not provided a progress report after fifteen (15) minutes, fire dispatch should request a progress report approximately fifteen (15) minutes after arrival of the first unit and every fifteen (15) minutes thereafter.

11.7.2.1.1.3.3 Other periodic progress reports will be provided/requested based upon the incident conditions.

11.7.2.1.1.4 Search statuses such as; primary search complete, secondary search complete, victims located on the second floor, all clear.

11.7.2.1.1.5 Incident update statuses such as; fire under control, fire out, extrication complete, leak controlled.

11.7.2.2 All incident statuses will be recorded in the CAD system as part of the incident documentation.

11.7.2.3 Fire dispatch shall advise the incident commander of the duration of the working incident at fifteen (15) minute intervals throughout the incident.

11.7.2.3.1 The incident commander can request the fifteen (15) minute time advisories be discontinued when he or she deems it is no longer necessary.

11.7.2.4 All statuses of an incident operating on a talk group other than Alpha 1 (FDP1) shall be repeated on Alpha 1.

11.7.3 Attachment M – Staff Notifications. This attachment contains additional incident related notifications that shall be handled by Communications.

11.8 Critical Transmissions/Situations

11.8.1 General

11.8.1.1 Any critical communication shall be appended with the words "emergency traffic" to gain the attention of fire dispatch and other units operating on the channel.

11.8.1.1.1 Example:

11.8.1.1.1.1 ***Unit 838 to Howard, Emergency Traffic***

11.8.1.2 Polling of Units

11.8.1.2.1 To ensure receipt of a critical message, units shall be "polled." "Polling" requires fire dispatch, or the incident command, to contact each unit operating on an incident to assure receipt of information.

11.8.1.2.1.1 This shall be done when the message is of a critical nature concerning safety, response, or incident operations (e.g. placing units in-service).

11.8.1.2.1.2 When "polling" is conducted by fire dispatch, the message tone should precede the "polling" of units.

11.8.2 Emergency Button Activation

11.8.2.1 When the emergency button of a unit *on the scene of an incident* is activated fire dispatch shall immediately advise incident command of the activation and the unit's identity. The incident commander shall handle contacting the unit to determine whether the activation was intentional or accidental.

11.8.2.2 When the emergency button of a unit *not on the scene of an active incident* is activated, fire dispatch shall attempt to contact the unit directly.

11.8.2.2.1 The dispatcher will call the unit twice, waiting 10 seconds for a reply after each attempt.

11.8.2.2.2 If a contact attempt is successful, the fire dispatcher shall transmit the following message: "**Howard to [unit#], Advise your status**"

11.8.2.2.2.1 To ensure safety of personnel, the term "emergency" shall **not** be used by Communications during attempts or actual contact with sending unit.

11.8.2.2.2.2 A reply blatantly inconsistent with the request or incident to which the unit is assigned should be considered an indication of a unit in trouble. The dispatcher will immediately initiate a police response to the unit's last known location.

11.8.2.2.3 If contact attempts are unsuccessful, the dispatcher shall immediately initiate a police response to the unit's last known location, advise the appropriate battalion chief, and continue to attempt contact with the unit at 15 second intervals. Attempts to contact the unit should continue until advised to discontinue by a chief officer.

11.8.2.2.4 If the Emergency Button is accidentally pressed, depress and hold the Emergency Button until the activation is cleared (approximately 2 seconds) and promptly advise Communications of the accidental activation.

11.8.3 May Day

11.8.3.1 This is an incident status where a unit operating on the incident has declared an emergency. Incident command will request fire dispatch involvement as needed.

11.8.3.1.1 **If a person is unable to give a voice message or no immediate response to an emergency voice message is received from fire dispatch, press the Emergency Button.**

11.8.3.2 Further information is available in the Department's mayday policy.

11.8.4 Call for Evacuation

11.8.4.1 Fire dispatch shall sound the evacuation tone (no longer than 15 seconds in duration) followed by a message advising all personnel to evacuate the structure when requested by the incident commander. Tone and message are to be repeated twice.

11.8.4.1.1 Example:

11.8.4.1.1.1 (evacuation tone) **All personnel operating in the building are to evacuate the structure immediately.** (evacuation tone) **All personnel operating in the building are to evacuate the structure immediately. 1730.**

11.8.4.2 The evacuation tone and message shall be broadcast over the announcement channel. The Announcement channel is located on Channel 7 in the Bravo (ANN1), Charlie (ANN2) and Delta (ANN3) zones.

11.8.5 Vehicle Accidents Involving Fire Department Equipment

11.8.5.1 In the event a DFRS vehicle is involved in a motor vehicle crash, the officer or operator will immediately notify fire dispatch.

11.8.5.1.1 Fire dispatch will replace the unit, if on a response, and make appropriate notifications.

11.8.5.1.2 Notifications shall be made in accordance with Attachment M, DFRS Staff Notification Criteria.

11.8.6 Calls for Police Assistance at the Scene of an Emergency

11.8.6.1 For routine requests of police assistance (ALS Critical, vehicle crashes, fires, traffic control, crowd control, etc.), Department personnel shall provide fire dispatch with the reason for police assistance as well as the number of officers needed at the scene.

11.8.6.1.1 HCPD will respond as appropriate and as available.

11.8.6.2 For requests of police assistance when **imminent danger exists** to DFRS personnel, the requesting unit shall notify fire dispatch by stating their unit identifier followed by "10-78".

11.8.6.2.1 Example:

11.8.6.2.1.1 ***Paramedic one-fifteen, 10-78.***

11.8.6.2.2 HCPD shall be requested to initiate an expedited response.

11.8.6.2.3 When possible, the requesting unit should state the reason for the urgent request and identify any hazards which may be encountered by responding units (i.e. man with a gun on roof, hostile crowd, mental subject, etc.).

11.8.7 Hostage Situation, Bomb Threats, Special/Unique Incidents

11.8.7.1 A request for Department apparatus to respond to hostage situations, bomb threats or other unique incidents shall be dispatched promptly.

11.8.7.1.1 Communications personnel shall notify the appropriate battalion chief after dispatching the requested apparatus to advise of situation specifics.

11.8.7.2 Even if no fire department units are requested, police dispatch should keep fire dispatch informed of these types of incidents to reduce the likelihood of fire department units unknowingly responding into an area or situation where police department units are already operating.

11.8.8 Condition Overload

11.8.8.1 When the conditions in the Communications Center become such that its ability to manage the workload is adversely impacted, the ECS or designee may authorize placing non-incident zone channels (zones other than Bravo, Charlie, and Delta) on Condition Overload. This status is intended to last no longer than 45 minutes. Fire dispatch shall make the following announcement on channels Alpha 1 (FDP1) and Alpha 2 (OPS1), "Howard operating on Condition Overload." Additionally, a notification shall be sent via alpha pager to the "fire group".

11.8.8.1.1 Specific notification shall immediately be made to the Department's Deputy Chief of Communications and Information Technology and both Battalion Chief 1, Battalion Chief 2, EMS 1 and the Department Communications Liaison.

11.8.8.1.1.1 Specific information detailing the circumstances necessitating Condition Overload and corrective actions being taken shall be provided.

11.8.8.2 During Condition Overload:

11.8.8.2.1 Radio transmissions on non-incident zone channels should be limited to the following incident necessary messages:

11.8.8.2.1.1 Responding/En Route

11.8.8.2.1.2 On the scene (first unit only)

11.8.8.2.1.3 Status changes (includes releasing units from incident)

11.8.8.2.1.4 In-Service

11.8.8.3 When conditions improve or 45 minutes has passed the ECS should discontinue Condition Overload. Fire dispatch shall make the following announcement on channels Alpha 1 (FDP1) and Alpha 2 (OPS1), "Howard is no longer on Condition Overload." Additionally, a notification shall be sent via alpha pager to the "fire group".

11.9 Status Timers in CAD

11.9.1 Currently, the timers in CAD can only be set in one (1) minute increments.

11.9.2 Statuses with timer settings

11.9.2.1 Pending – 1 minutes
(Department standard - call receipt to dispatch – 90 seconds)

11.9.2.2 Dispatch – 2 minutes
(Department standard is 90 seconds)
11.9.2.3 En Route – 15 minutes
11.9.2.4 Arrive – 30 minutes
11.9.2.5 Transport – 20 minutes
11.9.2.6 At-Hospital – 30 minutes

11.9.3 When the unit alarm goes off, fire dispatch personnel shall contact the unit to obtain a status.

11.9.3.1 When a unit advises they are in a status other than the one indicated in the CAD system, fire dispatch personnel shall modify the status as appropriate

11.9.3.2 No unit alarms for the statuses shown above shall be reset to an inactive status except as shown below.

11.9.3.2.1 Units known to be operating on an incident do not have to be queried for their status and the Arrive alarm can be reset to inactive.

12 Non-Incident Communications Practices and Procedures

12.1 Unit Statuses

12.1.1 Department personnel are responsible for providing, and fire dispatch personnel are responsible for recording in CAD, the following unit statuses as they relate to non incident activities. Timely entry into CAD is important as the Department uses this information in analyzing its performance. Comments should be entered into CAD when appropriate.

12.1.1.1 In-service on the air

12.1.1.1.1 Department personnel shall provide a reason and/or destination.

12.1.1.1.2 Units leaving their first due area will provide an expected time they will be out of their first due area in addition to their destination.

12.1.1.1.2.1 Fire dispatch shall change the location of the unit in CAD to the stated destination and change them back to their home station when the unit advises.

12.1.1.2 In-quarters
12.1.1.3 Out-of-service

12.1.1.3.1 Department personnel should provide a reason for the status, and expected duration.

12.1.1.4 In-service in quarters
12.1.1.5 Unit in reserve

12.1.1.6 Shared crew

12.1.1.6.1 The station officer, or his or her designee, shall provide this status for a unit normally sharing a crew with another unit when the "shared" unit becomes staffed with a dedicated crew or a when it is no longer staffed with a dedicated crew.

12.2 Special Events - Event Channel (Alpha 5)

12.2.1 This channel is primarily to be used for Department activities where multiple units are providing standby service. (e.g. Merriweather Post Pavilion medical standby during a concert.)

12.2.1.1 When a special event assigned to this channel changes from a standby activity to an emergency incident requiring the dispatch of a chief officer and additional units, the incident shall be moved over to an incident zone. (e.g. Bravo, Charlie, Delta)

12.3 Non-Emergency Messages

12.3.1 General

12.3.1.1 Fire dispatch shall not transmit non-emergency personal communications over the 800 MHz radio system.

12.3.1.2 Fire dispatch can provide messages to all Department personnel or groups of personnel via tone pagers, CAD printers, alpha pagers and cell phones as outlined in this section.

12.3.1.3 When important messages are sent to all station printers, fire dispatch shall advise units over the radio to check their printer for a message as well as provide the nature of the message.

12.3.2 Natural Hazard Information

12.3.2.1 Communications will notify all fire stations and the on-duty battalion chief(s) (via station printers or alphanumeric pagers, as appropriate) of any weather watches/warnings issued by the National Weather Service. This will include activation of the snow emergency plan.

12.3.2.1.1 Additional notifications will be at the discretion of the battalion chief(s).

12.3.2.2 Tornadoes

12.3.2.2.1 Besides the station printer notification, station tones for the identified warning area will be activated along with the "All-Call" tone.

12.3.2.3 Earthquakes

12.3.2.3.1 Communications will immediately notify an Emergency Management representative and the on-duty battalion chief(s) of any reports of tremors regardless of intensity or damage.

12.3.3 Howard County Communications Center Status
12.3.4 Significant Events
12.3.5 Staff Notifications as Required in Attachment M.
12.3.5.1 This attachment contains additional non-incident related notifications that shall be handled by the Communications Center personnel.
12.3.6 Contacting Individuals
12.3.6.1 Department personnel should attempt to contact an individual via phone or alpha pager prior to requesting fire dispatch to tone page the individual.
12.3.6.2 The process for contacting an individual via a tone shall consist of the following steps:
12.3.6.2.1 Step 1 – Initial Alert
12.3.6.2.2 Step 2 – Staff Tone(s)
12.3.6.2.3 Step 3 – Message
12.3.6.3 Example
12.3.6.3.1 **Paging Unit 2** (*paging tones*) **Howard to Unit 2 contact unit 3 in his office. 1634.**

12.4 After Hours Accountability

12.4.1 This section is intended for those units/personnel who normally travel alone and shall be effective between the hours of 1900 and 0700. This includes, but is not limited to, Battalion Chiefs, Medical Duty Officers, Volunteer Chief Officers and non-field DFRS operational and staff personnel.
12.4.2 Objective:
12.4.2.1 Assure the welfare of Fire and Rescue personnel who normally travel alone by assuring they remain accounted for between destinations between the hours of 1900 and 0700.
12.4.3 Units/personnel shall provide the following statuses as appropriate:
12.4.3.1 In-service-on-the-air when initiating travel on Fire and Rescue related activities or upon clearing an incident and remaining "on-the-road."
12.4.3.2 In-quarters or off-the-air when reaching their "final" destination (e.g. quarters or residence) for the evening.
12.4.4 Fire Dispatch Personnel shall perform the following:
12.4.4.1 Track in CAD the status of all units/personnel to assure they are accounted for as intended by this procedure.
12.4.4.2 Initiate radio contact with those units/personnel whose in-service-on-the-air status is not reasonable.
12.4.4.2.1 If radio contact is unsuccessful, Communications personnel shall attempt to contact personnel normally assigned to the unit via another communications means such as; tone pager, alpha-numeric pager, cell phone, or telephone.

12.4.4.2.2 Unsuccessful contact shall be reported to the ECS and the proper field battalion chief for further action if necessary.

12.4.5 Examples:

12.4.5.1 ***Battalion Chief 2 in-service remaining on-the-air.*** **Battalion Chief two remaining on-the-air. 2132.**

12.4.5.2 ***Chief 1-B off-the-air at my residence.*** **Chief 1-B off-the-air. 2333.**

13 Blue Alert Status

13.1 A Blue Alert is a Department operating status that *supersedes all* hospital bypass statuses. Under Blue Alert units will transport to the closest hospital regardless of hospital status.

13.1.1 Blue alert indicates the operating status of the Department, not the hospitals, and will be announced as follows: "**Howard to all stations. Howard County Department of Fire and Rescue is on blue alert. 1514."**

13.2 Communications will contact the on-duty battalion chief(s) when conditions warrant a blue alert (e.g., weather, apparatus availability, etc.)

13.3 The on-duty battalion chief(s) will authorized blue alert, or in his/her absence the On-Call Deputy Chief.

13.4 A blue alert will automatically be enacted whenever the snow emergency plan is placed into effect and will be canceled when lifted, if not canceled earlier.

13.5 Communications will send a message to all station printers and the alpha pager 'Fire Group' immediately before announcing both the activation and cancellation of a blue alert.

13.6 Howard County General Hospital emergency room and EMRC will be notified of the blue alert.

14 Types of 800 MHz System Failures

14.1 Radio system failures and corrective actions described in this section only pertain to the Howard County 800 MHz radio system. Other 800 MHz radio systems to which a radio may have access will still function properly.

14.2 Site Trunking

14.2.1 Communications Center is unable to talk on radio system at their consoles.

14.2.1.1 The radios – mobiles and portables - will display "Site Trunking".

14.2.1.2 Fire dispatch will be able to work via portables or other backup equipment.

14.2.2 Station Alerting may not be available. Phone alerting and alerting via direct contact over radio should be anticipated.

14.2.3 Field Operations should continue to function as normal.

14.3 Fail Soft

14.3.1 The radio system's ability to trunk radio traffic has failed.

14.3.1.1 Portable and mobile radios will display "Fail Soft" in the display when the radio system has gone into Fail Soft mode.

14.3.2 Radio system functionality has been reduced to 15 frequencies as shown in Attachment N. DFRS has primary use of four (4) of those frequencies – which are referred to as channels for the purpose of this discussion on Fail Soft operations. The four channels allocated to the Department are Channels 6, 7, 8, and 9. Most 800 MHz talk groups will be placed into one (1) of the fifteen (15) channels to provide a minimum level of radio communications capability. Department talk groups are indicated in **bold**. Talk groups not allocated to a Fail Soft frequency will sound a "honk" and indicate "Out of Range" in the display when selected.

14.3.2.1 Channel 1 (digital) – The following talk groups will be sharing a common frequency: CIB, V&N1, V&N2, CID1, CID2, WARR, STAFF, IAD, **ARSN**, YSS, TES, TAC, SRO

14.3.2.2 Channel 6 (analog) – The following talk groups will be sharing a common frequency: **FDP1**, **OPS1**, **OPS2**, **HCGH**, **EMKX**, **BAT1**, **BAT2** ,**FIOP10**, **FIOP11**, **FIOP12**, PIOP1, PIOP2, HEALTH

14.3.2.3 Channel 7 (digital) – The following talk groups will be sharing a common frequency: (Bravo Zone talk groups only) **FI10**, **FI11**, **FI12**, **FI13**, **WTR1**, **STG1**

14.3.2.4 Channel 8 (digital) – The following talk groups will be sharing a common frequency: (Charlie Zone talk groups only) **FI20**, **FI21**, **FI22**, **FI23**, **WRT2**, **STG2**

14.3.2.5 Channel 9 (digital) – The following talk groups will be sharing a common frequency: **FI30**, **FI31**, **FI32**, **FI33**, **WTR3**, **STG3**, **ADMN**, **SRST**, **OPNS**, **CIT**, **SUSV**, **TRNG**, **VCHF**, **LFSF**, **EVT1**

14.3.2.6 Talk groups that are not assigned to a Fail Soft frequency/channel – **VOL1**, **VOL2**, **VOL3**, **VOL4**, **VOL5**, **VOL6**, **EMRC**, **MED4**, **MED8**, **ANN1**, **ANN2**, **ANN3**

14.3.3 All radio traffic is to be limited under these conditions.

14.4 Complete 800 MHz System Failure

14.4.1 The radio system is non-operational.

14.4.2 The best option for radio use under these circumstances is to utilize the Regional Interoperability Network System (RNS) channels.

14.4.2.1 RNS is basically a line of site communications system and will work best when radios are in close proximity to each other such as on the scene of an incident.

14.4.2.1.1 In the Alpha/Bravo/Charlie/Delta Zones RNS5 is on Alpha 14 and RNS6 is on Alpha 15.

14.4.2.1.2 Additional RNS channels are available in the Oscar Zone. RNS1 is on Oscar 6, RNS2 is on Oscar 7, RNS3 is on Oscar 8, RNS4 is on Oscar 9, RNS5 is on Oscar 10, RNS6 is on Oscar 11.

14.4.2.2 Communicating over any distance will require using resources other than RNS.

14.4.2.2.1 Cell phones should be considered as a means to communicate between units, and between units and fire dispatch.

14.4.3 Station Alerting may not be available. Phone alerting should be anticipated.

15 Knox Box Key Release Procedure

15.1 Procedure for field units equipped with a Knox Box key.

15.1.1 From the channel in use (Alpha 1, Bravo 1,…), notify fire dispatch that you need to release a Knox Box key and are switching to Alpha 8.

15.1.1.1 If you are in Zones B, C or D, the key release can be accomplished on Channel 8 (Bravo 8, Charlie 8, or Delta 8). Bravo 8, Charlie 8 and Delta 8 can still be referred to as Alpha 8. The dispatch consoles do not display Bravo 8, Charlie 8 or Delta 8.

15.1.2 Advise fire dispatch you are on Alpha 8 and provide the key number to be released.

15.1.3 After the release tone has been transmitted, advise dispatch if key has been successfully released or not.

15.1.3.1 If the key has been released, return to the channel in use.

15.1.3.2 If the key did not release, confirm the key number with fire dispatch and attempt the release again. Two attempts shall be made before considering the release to be unsuccessful.

15.1.3.2.1 If the release is unsuccessful, the crew shall:

15.1.3.2.1.1 Notify the Station Officer upon return to quarters so corrective actions can be initiated.

15.1.3.2.1.2 Initiate other actions to gain entry into the secure property. Other actions can include obtaining a Knox Box key from another unit on the call, forcing entry, waiting for a resident with a key, or the like as dictated by the nature of the incident.

15.1.4 Notify fire dispatch on the channel in use when the Knox Box key has been secured.

15.2 Release Procedure for Fire Dispatch Personnel

15.2.1 A field unit requests the release of a Knox Box key and advises they are switching to Alpha 8.

15.2.1.1 Field units have Alpha 8 programmed into Zones B, C or D on Channel 8 (Bravo 8, Charlie 8, or Delta 8). Fire personnel may refer B8, C8 or D8 as Alpha 8. The fire dispatch consoles do not display Bravo 8, Charlie 8 or Delta 8.

15.2.1.2 Always use Alpha 8 when you need to speak with a Fire Department Unit on B8, C8 or D8.

15.2.2 The field unit switches to Alpha 8 and advises fire dispatch they are on Alpha 8 and need a specific Knox Box key released. Fire personnel will give the specific key number at this time.

15.2.3 Once the field unit advises they are on Alpha 8 and have given a key number, switch to the appropriate Knox Box tab on the CentraCom Gold Elite console and transmit the release tone.

15.2.4 The field unit will advise whether or not the key has been successfully released.

15.2.4.1 If the key did not release, contact shall be made with the requesting unit on Alpha 8 to confirm the key number and retransmit the release tone. Two attempts at releasing the key shall be made before considering the release unsuccessful.

15.2.5 The field unit will switch back to the channel in use.

15.2.6 The field unit will advise on the channel in-use when the Knox Key has been secured.

15.3 Examples of the Knox Box key release procedure:

15.3.1 ***Engine two-one to Howard.*** **Engine two-one.** ***Need to release a Knox Box key, switching to Alpha 8.*** **Engine two-one switching to Alpha 8.** ***Engine two-one is on Alpha 8, release Knox Box key 38.*** Knox Box release tones transmitted. ***Engine two-one Howard key release successful, switching back to Alpha 1.***

15.3.2 ***Paramedic five-five Howard.*** **Go ahead Paramedic five-five.** ***Need to release a Knox Box key, switching to Charlie 8.*** **Okay Paramedic five-five, switch to Charlie 8.** ***Paramedic five-five is on Charlie 8, release key 18.*** **Releasing key 18.** Knox Box release tones transmitted. ***Paramedic five-five to Howard, the key did not release. Attempt to release key 18 again.*** Knox Box release tones transmitted. ***Paramedic five-five to Howard, the key did not release. Have Engine five-two release their Knox Box key.*** **Okay Paramedic five-five, we will contact Engine five-two. 1821.** ***Paramedic five-five is back on Charlie 1.*** **Paramedic five-five on Charlie 1. 1822.**

15.3.3 ***Engine two-one to Howard, key 38 has been secured.*** **Okay Engine two-one. 0221.**

16 Suggestions and Problem Reporting

16.1 All suggestions and/or problem reporting pertaining to Department communications shall be directed through the appropriate channels, in writing, to the deputy chief of Communications, Information and Technology, or his or her designee. The Deputy Chief, or designee, will review the comments and initiate appropriate action.

16.2 Communications Problems

16.2.1 Problems requiring immediate attention should be handled as outlined in this document under Section 11, "Contacting the Communication Center".

16.2.2 Problems not requiring immediate attention should be documented in writing to the deputy chief of Communications, Information and Technology via the appropriate chain of command.

17 Fire Dispatch CentraCom Gold Elite Configuration

17.1 The information shown below is to assure the CentraCom Gold Elite consoles in fire dispatch are properly configured.

17.1.1 Fire Dispatch Positions 1 & 2 shall use the "Trunked Fire1" template/file.

17.1.2 Fire Dispatch Positions 3 & 4 shall use the "Trunked Fire2" template/file.

17.2 The name of the template/file is shown in the upper left hand corner of the CentraCom Gold Elite dispatch screen. *Example: "Trunked Fire1 – CENTRACOM Gold Elite Dispatch"*

Approved:

Joseph A. Herr
Fire Chief

Attachment A – Phonetic Alphabet

Alpha	**N**ovember
Bravo	**O**scar
Charlie	**P**apa
Delta	**Q**uebec
Echo	**R**omeo
Foxtrot	**S**ierra
Golf	**T**ango
Hotel	**U**niform
India	**V**ictor
Juliet	**W**hisky
Kilo	**X**-ray
Lima	**Y**ankee
Mike	**Z**ulu

Attachment B – Daily Check Sheet

Fire Dispatch

This check sheet has been developed to provide guidance for fire dispatch personnel at the start of each shift. It is to be completed by the **primary** fire dispatcher within ½ hour of the start of each shift, once at 0700 hours and again at 1900 hours. It is **not** required to be completed each time the primary dispatcher changes during a normal shift.

Date _____ ____ 0700 Check ____ 1900 Check

Shift Lineup			
Primary Dispatcher - Alpha 1	**Times**	**Operations Dispatcher – Alpha 2**	**Times**

Shift Checks		
Task	**"√"**	**Comments**
The Patch is on terminal FD____ • "Alpha 1 and Fire Patch" • Always with the primary dispatcher		
Msel 1 set to "*Fire 1 and Alpha 1*"		
FMARS turned up		
Weather computer up		
NAWAS volume audible		
Contact station's 1 – 11 by phone to verify unit statuses		
Ensure 'shared crews' are properly entered • E61 & T6 (Crew# *25*), • AE211 & AT21 (Crew# *21*) • CE123 & CL12 (Crew# *64*) • BE351 & BE352 (Crew# 351) • BM355 & BA355 (Crew# 35) • BM356 & BA356 (Crew# 36) • E22 & SQ2 (Crew# 7) (0700-1700 M-F) • E11 & SQ1 (Crew# 1) (0400-1600 M-F) • E501, E502, E503, TWR50 (Crew# 501) • PRE49 & PSQ49 (Crew# 49) • E201 & A205 (Crew# 20) • CA129 & CP129 (Crew# 29) • CA128 & CP128 (Crew# 28) • CA18 & CP18 (Crew# 18) • CA19 & CP19 (Crew# 19)		
Hospital Statuses Utilize computer under TV to access the following web sites for statuses: • http://miemss.umaryland.edu/Chats/Reg3.html • http://miemss.umaryland.edu/Chats/Reg5.html		

_____

Signature of Primary Dispatcher at Start of Shift

Attachment C – List Backup Files to be Maintained in the Communication Center

- DFRS Deployment Plans
- Event Type Priorities
- Classification Types
- Line-Up Back-Up
- Equipment Master List
- Mutual Aid Capabilities
- Special Box Areas
- Mutual Aid Units in CAD
- Response List
- Balance of Alarm
- Station Master
- Radio Identifiers
- CAD Alpha Paging Chart
- Staff Notification Criteria

Attachment D – Unit IDs for Prince George's County Response

Station	Unit	Prince George's ID
Savage (Station 6)	Engine 61	Engine 701
	Engine 62	Engine 702
	Paramedic 65	Paramedic 70
	Ambulance 66	Ambulance 705
	Brush 67	Brush 70
	Truck 6	Truck 70
	Chief 6	Chief 70
	Chief 6 A	Chief 70 A
	Chief 6 B	Chief 70 B
	Chief 6 C	Chief 70 C
Rivers Park (Station 10)	Engine 101	Engine 711
	Paramedic 105	Paramedic 715
	Tower 10	Tower 71
Scaggsville (Station 11)	Engine 111	Engine 721
	Paramedic 115	Paramedic 725

Attachment E – Guidelines for Identifying Station-based Units

Prefix	Description	Assigned Number
Engine	Class A engine carrying 500-1000 gallons of water	Station number plus a second number in the range 1 – 3.
	Class A engine carrying vehicle rescue equipment or greater than 1000 gallons of water	Station number plus the second number 4
Squad	A heavy rescue unit carrying tools for vehicle rescue, firefighting, and other emergency operations	Station number only
Rescue	A unit carrying tools for vehicle rescue only	Station number only
Tower	An aerial unit with an aerial ladder 75 feet or greater and a platform	Station number only
Truck	An aerial unit with an aerial ladder 75 feet or greater	Station number only
Quint	An aerial unit with an aerial ladder 75 feet or greater, a pump, hose and carrying 300 gallons or more of water	Station number only
Ambulance	A basic life support (BLS) unit with transport capability	Station number plus a second number in the range 5 – 6.
Paramedic	An advanced life support (ALS) unit with transport capability (paramedic level)	
Medic	An advanced life support (ALS) unit with transport capability (cardiac rescue technician [CRT] level)	
Canteen	Vehicle equipped to provide food services at the scene of an incident.	Station number only
Brush	A vehicle carrying a small amount of water and firefighting equipment capable of off-road operation	Station number plus a second number in the range 7-8.
Tanker	Any vehicle carrying more than 1000 gallons of water and not classified as a Class A engine	Station number only
Air Unit	Any vehicle capable of supplying a large quantity of breathing air	Station number only
Boat	Any self-propelled watercraft towed on a trailer	Station number only
Emergency Support Vehicle (ESV)	Any vehicle carrying emergency incident equipment and supplies	Station number only

Prefix	Description	Assigned Number
Utility	Any vehicle used to transport fire and rescue personnel and/or equipment	The first utility vehicle uses the station number only. Additional utilities shall use the station number plus a sequential number beginning with the number "1".
Chief	Volunteer chief officers	• Chief uses the station number only. • Assistant and deputy chiefs use the station number plus a sequential alpha character beginning with the letter "A".

Attachment F – Guidelines for Identifying Non-Station-based Units

Bureau	Bureau Number(s)	Assigned Number
Office of the Fire Chief	1 and 2	• Chief, Chief Deputy and Deputy Chief use their bureau number only. (i.e. Unit 1, Unit 2, Unit 3) • Battalion Chiefs use a number starting with their bureau number plus a zero plus a number in the range 0 to 9. (i.e. Unit 300, Unit 301) • Captains use a number starting with their bureau number plus a number in the range 1 to 9 plus a zero. (i.e. Unit 310, Unit 320) • Lieutenant and other staff (uniformed and non-uniformed) use a number starting with the numbers of their bureau/division assignment plus a number in the range 1 to 9 (i.e. Unit 311, Unit 321)
Operations	3	
Communications and Information Technology	4	
Services	5	
Life Safety	6	
Training	18	
Light Duty Personnel	17	Radio identifiers will be created as necessary being with 1701

Attachment G – Exceptions to Unit/Staff Identification Guidelines

Apparatus/Staff Position	Radio Identification
Public Information Officer	Unit 40
Canteen 1 – stored at varying stations	Canteen 1
Mobile Command Post	Mobile 1
Battalion Chief for the first battalion	Battalion Chief 1
Battalion Chief for the second battalion	Battalion Chief 2
EMS Officer for the first battalion	EMS 1
EMS Officer for the second battalion	EMS 2
Reserve apparatus	Ambulances and engines – prefix will be "Reserve" , number determined by the Support Service Bureau

Attachment H – Jurisdictions/Agencies with Authorized Access to Department Talk Groups

Jurisdictions/Agencies Authorized to Operate on Department Talk Groups

- All Howard County Government Departments and their agents.
- Anne Arundel Fire Department and its agents.
- Prince George's Fire Department and its agents.
- Montgomery County Department of Fire and Rescue and its agents.
- Carroll County Fire Department and its agents.
- Frederick County Fire Department and its agents.
- Baltimore County Fire Department and its agents.
- Baltimore City Fire Department and its agents.
- Maryland Department of the Environment
- Johns Hopkins Applied Physics Laboratory Fire Department
- Baltimore Washington Airport

Talk Group Capabilites

1. Jurisdictions with 800 MHz digital capable radios and available space are expected to install the following sixteen Department talk groups. Using these talk groups allow mutual aid companies to operate directly with Department units without any intermediate actions such as patching.

	Zone and Channel (Common Name)	Talk Group Name
1	A1	FDP1
2	A2	FIR1
3	A3	EMS1
4	A4	HCGH
5	A5	EMKX
6	B1	FI10
7	B2	FI11
8	B3	FI12
9	B4	FI13
10	B5	WTR1
11	B6	STG1
12	C1	FI20
13	C2	FI21
14	C3	FI22
15	C5	WTR2
16	C6	STG2

2. Jurisdictions with 800 MHz radio that are not digital capable are expected to install the following three 800 MHz analog talk groups. Using these talk groups will allow mutual companies to operate directly with Department units via patching performed by fire dispatch personnel. Fire dispatch will manage the use of these talk groups.

	Zone and Channel (Common Name)	Talk Group Name
1	Fire Dispatch Use Only	FIOP10
2		FIOP11
3		FIOP12

Attachment I – Example of Radio Communications

1. All acknowledgments from fire dispatch (unit ID, a paraphrase of unit's message, time):

   Engine seven-one on the air. 1315.

2. Acknowledging a call from fire dispatch or another unit (receiving unit's ID, acknowledgement of calling unit's ID):

   Howard to Engine three-one. ***Engine three-one. Go ahead Howard.***

3. Reporting on the air for an emergency response (unit ID, staffing):

   Engine nine-one responding with four.

   a. All responding units will report their staffing, except ambulances with a normal staffing of two personnel.
   b. Communications will advise the highest ranking responding officer the total staffing for the incident.

4. Example of an initial status report (unit ID, status)

   Engine six-two to Howard. On the scene, side A with a three (3) story wood frame apartment building with smoke showing on the second floor, quadrant 4, captain has command. **Box alarm six-one. Engine six-two on the scene side A wood frame apartment building with smoke showing, quadrant 4, captain has command. 0003.**

5. Example of an updated status report of an incident:

   Engine eight-one to Howard. We have one room and contents fire, the fire is knocked down - will be holding all units. **Box alarm eight-two, 1234 St. Johns Lane. Engine eight-one reporting the fire knocked down, holding all units. 1854.**

6. Reporting on the air for non-emergency activities (unit ID, message):

   Engine five-two to Howard. On-the-air for a public education detail at the Clarksville Middle School. **Engine five-two on-the-air for a pub. ed. at Clarksville Middle School. 1325.**

   a. Any unit reporting on the air will advise the reason (area familiarization, map work, first-due area, etc.)

7. Returning to service from an incident (unit ID, availability status):

   Engine two-one Howard. We're ready. **Engine two-one, In-service. 0926.**

8. Reporting in station (unit ID, "in quarters"):

Tower seven Howard. In quarters. **Tower seven in the quarters. 0458.**

a. If available status has changed, say so when placing the unit in the station.

9. Ambulance/paramedic unit en-route to the hospital (unit ID, receiving facility, patient priority):

   Paramedic six-five to Howard. En route to Howard County General with a priority three patient. **Paramedic six-five transporting to Howard County General Hospital. 2234.**

10. At patient's side (APS); given by first arriving BLS and ALS providers (unit ID, "APS"):

    Paramedic nine-five to Howard. APS. **Paramedic nine-five APS. 2345.**

11. Arrival at the hospital (unit ID, facility name):

    Paramedic one-five Howard. At St. Agnes. **Paramedic one-five at St. Agnes. 2350.**

12. Non-emergency transport (unit ID, statement of non-emergency transport, receiving facility):

    Paramedic three-five to Howard. Out-of-service on a non-emergency transport to Harmony Hall. **Paramedic three-five en route to Harmony Hall. 1211.**

Attachment J – Incident Alarm Types

Alarm Type	Description
RESCUE	• Confined space rescues • Cave-ins • Building collapse • Drowning • Elevator Rescue • Water rescue • Bus accidents • Train Crashes (passenger/freight) • Aircraft Crashes • Transportation crashes with injury
BOX	• Single family dwelling (detached) • Gas or fuel leaks on interior of any structure • Outbuilding/shed • Detached garage • Barn • Trailer • Multiple family buildings (apartments, condos) • Townhouse • High-rise • Business structure • Schools • Institutional • Medical facility (includes: nursing homes) • Motel/Hotel • Any report of entrapment within any structure (includes: single family dwelling)
HAZ-MAT BOX	• Confirmed hazardous material incident
VEHICLE	• Automobiles • Trucks (all types) • Farm tractors • Lawn tractors • Construction equipment
MISCELLANEOUS	• Electrical hazards • Fill-in • Investigation (includes: gas or fuel leak on exterior) • Landfill fire • Lock-out/in • Wash down • Miscellaneous (fire reported out) • Tree/pole fire
BRUSH	• Brush • Field • Grass • Straw/hay bales • Woods
MEDICAL	• Emergency ambulance/medic unit calls

Attachment K – Zones and Associated Talk Groups

Alpha Zone		Primary zone for normal daily activities.	Fail Soft Channel
A1	FDP1	Alerting/Dispatch and primary operating channel. Typically patched to high band channel used for station alerting.	6
A2	OPS1	Minor/small fire incidents. Use as needed, multiple incidents acceptable.	6
A3	OPS2	Minor/small EMS incidents. Use as needed, multiple incidents acceptable.	6
A4	HCGH	Howard County General Hospital. Used for non-consult notifications. (Set up for Page function.)	6
A5	EVT1	Used for non-emergency events. (i.e. medical standby at Meriwether PP)	9
A6	BAT1	Non-incident chat channel.	6
A7	BAT2	Non-incident chat channel.	6
A8	EMKX	Emergency/Knox Box channel. Not to be used for any other purpose.	6
A9	NDP1	HC Police Northern Dispatch (Police Alpha 1)	2
A10	SDP1	HC Police Southern Dispatch (Police Bravo 1)	3
A11	FIOP10	Analog channel. Typically used for patching by communications.	6
A12	FIOP11	Analog channel. Typically used for patching by communications.	6
A13	FIOP12	Analog channel. Typically used for patching by communications.	6
A14	RNS5	Regional Interoperability Network System. Non-trunked channels (conventional resources). Most jurisdictions with 800 MHz systems will support this channel. **No emergency button and no radio identifier functionality.** **Set to operate in direct mode (radio to radio) only.**	n/a
A15	RNS6		
A16	FDP1	Alerting/Dispatch and primary operating channel.	6

Bravo Zone		Incident One – used for first significant incident.	Fail Soft Channel
B1	FI10	Initial operational channel for the incident. Incident Command operations shall remain on this channel as an operation expands to use more channels.	7
B2	FI11	Used as necessary.	7
B3	FI12	Used as necessary.	7
B4	FI13	Used as necessary.	7
B5	WTR1	Water Supply channel. Used for other incident activities as necessary.	7
B6	STG1	Staging channel. Used for other incident activities as necessary.	7
B7	ANN1	Announcement channel for Bravo Zone. Transmits on Bravo 1 – 6.	n/a
B8	EMKX	Emergency/Knox Box channel. Not to be used for any other purpose.	6
B9	PI10	HC Police Incident 10 (Police Charlie 1)	4
B10	PI17	HC Police Incident 17 (Police Charlie 7)	4
B11	FIOP10	Analog channel. Typically used for patching by communications.	6
B12	FIOP11	Analog channel. Typically used for patching by communications.	6
B13	FIOP12	Analog channel. Typically used for patching by communications.	6
B14	RNS5	Regional Interoperability Network System. Non-trunked channels (conventional resources). Most jurisdictions with 800 MHz systems will support this channel. **No emergency button and no radio identifier functionality. Set to operate in direct mode (radio to radio) only.**	n/a
B15	RNS6		
B16	FI10	Initial operational channel.	7

Charlie Zone		Incident Two – used for second significant incident.	Fail Soft Channel
C1	FI20	Initial operational channel for the incident. Incident Command operations shall remain on this channel as an operation expands to use more channels.	8
C2	FI21	Used as necessary.	8
C3	FI22	Used as necessary.	8
C4	FI23	Used as necessary.	8
C5	WTR2	Water Supply channel. Used for other incident activities as necessary.	8
C6	STG2	Staging channel. Used for other incident activities as necessary.	8
C7	ANN2	Announcement channel for Charlie Zone. Transmits on Charlie 1 – 6.	n/a
C8	EMKX	Emergency/Knox Box channel. Not to be used for any other purpose.	6
C9	PI20	HC Police Incident 20 (Police Delta 1)	5
C10	PI27	HC Police Incident 27 (Police Delta 7)	5
C11	FIOP10	Analog channel. Typically used for patching by communications.	6
C12	FIOP11	Analog channel. Typically used for patching by communications.	6
C13	FIOP12	Analog channel. Typically used for patching by communications.	6
C14	RNS5	Regional Interoperability Network System. Non-trunked channels (conventional resources). Most jurisdictions with 800 MHz systems will support this channel. **No emergency button and no radio identifier functionality. Set to operate in direct mode (radio to radio) only.**	n/a
C15	RNS6		
C16	FI20	Initial operational channel.	8

Delta Zone		Incident Three – used for third significant incident. Can be used for training when available. Emergency incidents get priority.	Fail Soft Channel
D1	FI30	Initial operational channel for the incident. Incident Command operations shall remain on this channel as an operation expands to use more channels.	9
D2	FI31	Used as necessary.	9
D3	FI31	Used as necessary.	9
D4	FI33	Used as necessary.	9
D5	WTR3	Water Supply channel. Used for other incident activities as necessary.	9
D6	STG3	Staging channel. Used for other incident activities as necessary.	9
D7	ANN3	Announcement channel for Delta Zone. Transmits on Delta 1 – 6.	n/a
D8	EMKX	Emergency/Knox Box channel. Not to be used for any other purpose.	6
D9	PI10	HC Police Incident 10 (Police Charlie 1)	4
D10	PI17	HC Police Incident 17 (Police Charlie 7)	4
D11	FIOP10	Analog channel. Typically used for patching by communications.	6
D12	FIOP11	Analog channel. Typically used for patching by communications.	6
D13	FIOP12	Analog channel. Typically used for patching by communications.	6
D14	RNS5	Regional Interoperability Network System. Non-trunked channels (conventional resources). Most jurisdictions with 800 MHz systems will support this channel. **No emergency button and no radio identifier functionality. Set to operate in direct mode (radio to radio) only.**	n/a
D15	RNS6		
D16	FI30	Initial operational channel.	9

Echo Zone		Medical Zone 1	Fail Soft Channel
E1	EMRC	Howard County EMRC call channel	n/a
E2	MED4	Howard County Med 4	n/a
E3	MED8	Howard County Med 8	n/a
E4	HCGH	Howard County General Hospital. Used for non-consult notifications. (Set up for Page function.)	6
E5	MCEMRC	Montgomery County EMRC call channel	n/a
E6	MCMED6	Montgomery County Med 6	n/a
E7	MCMED8	Montgomery County Med 8	n/a
E8	MGH	Montgomery General Hospital via Montgomery County 800 MHz system. Used for non-consult notifications. (Set up for Page function.)	n/a
E9	HCH	Holy Cross Hospital via Montgomery County 800 MHz system. Used for non-consult notifications. (Set up for Page function.)	n/a
E10	MPTY	Unused	n/a
E11	MPTY	Unused	n/a
E12	FCEMRC	Frederick County EMRC call channel	n/a
E13	FCMED4	Frederick County Med 4	n/a
E14	FCMED8	Frederick County Med 8	n/a
E15	MPTY	Unused	n/a
E16	MPTY	Unused	n/a

Foxtrot Zone		Medical Zone 2	Fail Soft Channel
F1	CCEMRC	Carroll County EMRC call channel	n/a
F2	CCMED4	Carroll County Med 4	n/a
F3	CCMED8	Carroll County Med 8	n/a
F4	MPTY	Unused	n/a
F5	BCEMRC	Baltimore County EMRC call channel	n/a
F6	BCMED4	Baltimore County Med 4	n/a
F7	BCMED8	Baltimore County Med 8	n/a
F8	MPTY	Unused	n/a
F9	AAEMRC	Anne Arundel EMRC call channel	n/a
F10	AAMED4	Anne Arundel Med 4	n/a
F11	AAMED8	Anne Arundel Med 8	n/a
F12	MPTY	Unused	n/a
F13	BFEMRC	Baltimore City EMRC call channel	n/a
F14	BFMED	Baltimore City Med channel	n/a
F15	MPTY	Unused	n/a
F16	MPTY	Unused	n/a

Golf Zone		Department Division and Bureau, and Volunteer Department Channels	Fail Soft Channel
G1	ADMN	Administration (Set up for Page function.)	9
G2	SRST	Senior Staff	9
G3	OPNS	Operations (Set up for Page function.)	9
G4	CIT	Communication and Information Technology (Set up for Page function.)	9
G5	SUSV	Support Services (Set up for Page function.)	9
G6	LFSF	Life Safety (Set up for Page function.)	9
G7	TRNG	Training Division (Set up for Page function.)	9
G8	MPTY	Unused	n/a
G9	MPTY	Unused	n/a
G10	VCHF	Volunteer Fire Chiefs (Set up for Page function.)	9
G11	VOL1	Elkridge VFD	n/a
G12	VOL2	Ellicott City VFD	n/a
G13	VOL3	West Friendship VFD	n/a
G14	VOL4	Lisbon VFD	n/a
G15	VOL5	Fifth District VFD	n/a
G16	VOL6	Savage VFD	n/a

Arson Zone		Arson Zone (Only available to DFRS Arson Team personnel issued a secure radio.)	Fail Soft Channel
AR1	ARSN	Fire and Police Arson Investigations (Secure, Police Echo 8)	1
AR2	CIB1	HC Police (Police Alpha 10, Bravo 10)	2
AR3	CIB2	HC Police (Secure, Police Alpha 11, Bravo 11)	2
AR4	CID1	HC Police (Secure, Police Echo 2)	1
AR5	CID2	HC Police (Secure, Police Echo 3)	1
AR6	MPTY		n/a
AR7	MPTY		n/a
AR8	MPTY		n/a
AR9	MPTY		n/a
10	MPTY		n/a
11	MPTY		n/a
12	MPTY		n/a
13	MPTY		n/a
14	MPTY		n/a
15	MPTY		n/a
16	MPTY		n/a

Hotel Zone		Anne Arundel County
H1	AAAL	Alpha – Main dispatch channel. Respond on transfers on this channel. Remain on this channel until instructed otherwise. Used for on-the-air non-response activities.
H2	AABR	Bravo – Primary response channel anywhere in Anne Arundel County for Local Boxes - brush, mulch, Medical Boxes, Brush, Auto Fire, MVA's with no entrapment. (Generally - calls with one or two units)
H3	AACH	Charlie – Overflow for primary response channel (AABR). Used during periods of exceptionally high call volume.
H4	AADE	Delta – Incident command channel for AAEC (Echo) and AAFO (Foxtrot).
H5	AAEC	Echo – Tactical Channel for Commercial Box Alarm, Rescue Box with entrapment, minor HazMat, and Fire Alarms anywhere in AA Co., Still Boxes (Fire Alarms)
H6	AAFO	Foxtrot – Tactical Channel for Commercial Box Alarm, Rescue Box with entrapment, minor HazMat, and Fire Alarms anywhere in AA Co., Still Boxes (Fire Alarms)
H7	AAGO	Golf – Administrative Use
H8	AAHO	Hotel – Special Operations Incidents (technical rescue, water rescue, etc.)
H9	AAIN	India – Special Operations Incidents (technical rescue, water rescue, etc.)
H10	AAJU	Juliet – Incident command channel for AAKI (Kilo) and AALI (Lima)
H11	AAKL	Kilo – Tactical Channel for Commercial Box Alarm, Rescue Box with entrapment, minor HazMat, and Fire Alarms anywhere in AA Co., Still Boxes (Fire Alarms)
H12	AALI	Lima – Tactical Channel for Commercial Box Alarm, Rescue Box with entrapment, minor HazMat, and Fire Alarms anywhere in AA Co., Still Boxes (Fire Alarms)
H13	AAMI	Mike – Standby and Training channel
H14	BWT2	BWI Tac 2
H15	BWT1	BWI Tac 1
H16	BWDS	BWI Dispatch

India Zone		Baltimore County
I1	BCMN	Main dispatch talk group
I2	BC4	West Side – primary talk group
I3	BC22	West Side – First incident talk group (Chief Involved) – Main Channel
I4	BC23	West Side – First incident talk group – Sub-Channel
I5	BC52	West Side – Second incident talk group (Chief Involved)
I6	BC53	West Side – Second incident talk group – Sub-Channel
I7	BC2	Central – primary talk group
I8	BC12	Central – Incident talk group (Chief Involved) – Main Channel
I9	BC13	Central – Incident talk group – Sub-Channel
I10	BC62	Not in use
I11	BC3	East Side – primary talk group
I12	BC32	East Side – First incident talk group (Chief Involved) – Main Channel
I13	BC33	East Side – First incident talk group – Sub-Channel
I14	BC42	East Side – Second incident talk group (Chief Involved) – Main Channel
I15	BC43	East Side – Second incident talk group – Sub-Channel
I16	BCMN	Main dispatch talk group

Juliet Zone		Carroll County
J1	CC1	Fire dispatch channel, all units in-service (on-the-air) monitor Channel 1, channel to be used when transferring, channel to use to notify CC of incidents when in their county.
J2	CC2	Miscellaneous type calls - non high priority
J3	CC5	Primary medical channel, rescue without entrapment
J4	CC6	Rescue with entrapment, flyouts, etc
J5	CC10	Talk group for first major incident - box alarms (local alarms), building collapse, large brush fie, etc.
J6	CC11	First incident related channel - not monitored - up to incident commander to determine use.
J7	CC12	First incident related channel - not monitored - up to incident commander to determine use.
J8	CC15	Talk group for second major incident
J9	CC16	Second incident related channel
J10	CC17	Second incident related channel
J11	CC20	Talk group for third major incident
J12	CC21	Third incident related channel
J13	CC22	Third incident related channel
J14	CC25	Talk group for fourth major incident
J15	CC26	Fourth incident related channel
J16	CC27	Fourth incident related channel

Kilo Zone		Frederick County
K1	FCMN	Fire Dispatch
K2	FC20	Fire Alarms, auto fires, miscellaneous calls, etc.
K3	FC10	EMS
K4	FC50	EMS
K5	FC30	First Tact channel for Serious PIs and Structures Fires
K6	FC31	Related incident channel for FC30 incident
K7	FC32	Related incident channel for FC30 incident
K8	FC40	Second Tact channel
K9	FC41	Related incident channel for FC40 incident
K10	FC42	Related incident channel for FC40 incident
K11	FC70	Third Tact channel
K12	FC71	Related incident channel for FC70 incident
K13	FC72	Related incident channel for FC70 incident
K14	FC80	Fourth Tact channel
K15	FC81	Related incident channel for FC80 incident
K16	FC82	Related incident channel for FC 80 incident

Lima Zone		Montgomery County
L1	MC7A	Dispatch
L2	MC7B	Standard Operations
L3	MC7C	Alternate Channels
L4	MC7D	Alternate Channels
L5	MC7E	Alternate Channels
L6	MC7F	Alternate Channels
L7	MC7G	First working incident
L8	MC7H	First working incident – Sub-group
L9	MC7I	First working incident – Sub-group
L10	MC7J	First working incident – Sub-group
L11	MC7K	Second working incident
L12	MC7L	Second working incident – Sub-group
L13	MC7M	Second working incident – Sub-group
L14	MC7N	Second working incident – Sub-group
L15	MC7O	Talk Around (Regional Interoperability Network System talk group)
L16	MC7B	Standard Operations

Mike Zone		Baltimore City
M1	BFA2	Dispatch Channel
M2	BFA1	Minor Incidents – non-EMS
M3	BFA3	EMS Incidents
M4	BFA4	Talk around
M5	BFA5	Administrative
M6	BFA6	Administrative
M7	BFB1	Major incidents Fireground
M8	BFB5	Major incidents Fireground
M9	BFC1	Major incidents Fireground
M10	BFC5	Major incidents Fireground
M11	MPTY	Unused
M12	MPTY	Unused
M13	MPTY	Unused
M14	MPTY	Unused
M15	MPTY	Unused
M16	BFA2	Dispatch Channel

Oscar Zone		Inter-Jurisdictional Zone – Non-Trunked Resources (Common to every 800 MHz radio except Department of Corrections)	Fail Soft Channel
O1	8CLL	NPSPAC Call (National Channel, monitored in Maryland by MEMA, currently available from Frederick County east and Harford County south to Richmond, VA)	n/a
O2	8TC1	NPSPAC Tactical Channel 1. **No emergency button and no radio identifier functionality.**	n/a
O3	8TC2	NPSPAC Tactical Channel 2. **No emergency button and no radio identifier functionality.**	n/a
O4	8TC3	NPSPAC Tactical Channel 3. **No emergency button and no radio identifier functionality.**	n/a
O5	8TC4	NPSPAC Tactical Channel 4. **No emergency button and no radio identifier functionality.**	n/a
O6	RNS1	Regional Interoperability Network System. Non-trunked channels (conventional resources). Most jurisdictions with 800 MHz systems will support this channel. **No emergency button and no radio identifier functionality. Can be used in both direct and repeater mode.**	n/a
O7	RNS2		
O8	RNS3		
O9	RNS4		
O10	RNS5		
O11	RNS6		
O12	MPTY	Unused	n/a
O13	MPTY	Unused	n/a
O14	MPTY	Unused	n/a
O15	??????	Contains template and template version information	n/a
O16	911	Intended for emergency and non-emergency use by any County agency that does not have 24 hour dispatcher services. (Emergency revert channel for all non-public safety radios.)	15

Sierra Zone		Intra-County Zone (Common to every 800 MHz radio except Department of Corrections)	Fail Soft Channel
S1	911	Intended for emergency and non-emergency use by any County agency that does not have 24 hour dispatcher services. (Emergency revert channel for all non-public safety radios.)	15
S2	CNY1	Countywide channel 1	15
S3	CNY2	Countywide channel 2	15
S4	CNY3	Countywide channel 3	15
S5	EOC	Emergency Operations Center channel	15
S6	COEX	County Executive channel (Secure)	15
S7	BEEM	Board of Education Emergency	13
S8	CALL HELP	Stolen/Misappropriated radios will be dynamically regrouped so they will only be able to operate on this channel.	n/a
S9	8CLL	NPSPAC Call (National Channel, monitored in Maryland by MEMA, currently available from Frederick County east and Harford County south to Richmond, VA) **No emergency button and no radio identifier functionality.** **Can be used in both direct and repeater mode.**	n/a
S10	8TC1	NPSPAC Tactical Channel 1. **No emergency button and no radio identifier functionality.** **Can be used in both direct and repeater mode.**	n/a
S11	8TC2	NPSPAC Tactical Channel 2. **No emergency button and no radio identifier functionality.** **Can be used in both direct and repeater mode.**	n/a
S12	8TC3	NPSPAC Tactical Channel 3. **No emergency button and no radio identifier functionality.** **Can be used in both direct and repeater mode.**	n/a
S13	8TC4	NPSPAC Tactical Channel 4. **No emergency button and no radio identifier functionality.** **Can be used in both direct and repeater mode.**	n/a
S14	RNS6	Regional Interoperability Network System. Non-trunked channels (conventional resources). Most jurisdictions with 800 MHz systems will support this channel. **No emergency button and no radio identifier functionality.** **Set to operate in direct mode (radio to radio) only.**	n/a
S15	FLT1	HC Highways – Fleet Channel	13
S16	911	Intended for emergency and non-emergency use by any County agency that does not have 24 hour dispatcher services. (Emergency revert channel for all non-public safety radios.)	15

Attachment L – 800 MHz Radio Templates

Fire & Rescue 800MHz Radio Template - PROFILE F0 (Master)																	
ZONE	NAME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A Alpha	MAIN	FDP1	OPS1	OPS2	HCGH	EVT1	BAT1	BAT2	EMKX	MDP1	SDP1	FIOP10	FIOP11	FIOP12	RHS5	RHS6	FDP1
B Bravo	INCIDENT ONE	FI10	FI11	FI12	FI13	WRT1	STG1	AIR1	EMKX	FI10	FI17	FIOP10	FIOP11	FIOP12	RHS5	RHS6	FI18
C Charlie	INCIDENT TWO	FI20	FI21	FI22	FI23	WRT2	STG2	AIR2	EMKX	FI20	FI27	FIOP10	FIOP11	FIOP12	RHS5	RHS6	FI28
D Delta	INCIDENT THREE	FI30	FI31	FI32	FI33	WRT3	STG3	AIR3	EMKX	FI30	FI37	FIOP10	FIOP11	FIOP12	RHS5	RHS6	FI38
E Echo	EMS1	EMRC	MED4	MED8	HCGH	MCEMRC	MCMED4	MCMED8	MED1	HCR	MPTY	MPTY	FCEMRC	FCMED4	FCMED8	MPTY	MPTY
F Foxtrot	EMS2	CCEMRC	CCMED4	CCMED8	MPTY	BCEMRC	BCMED4	BCMED8	MPTY	AAEMRC	AAMED4	AAMED8	MPTY	BFEMRC	BFMED	MPTY	MPTY
G Golf	STAFF	ADMN	SRST	OPNS	CIT	SUSV	LTSF	TRNG	MPTY	MPTY	VCHF	VOL1	VOL2	VOL3	VOL4	VOL5	VOL6
AR Arson	ARSON	ARSN	CID1	CID2	CID1	CID2	MPTY	MPTY	MPTY	MPTY	MPTY	MPTY	MPTY	MPTY	MPTY	MPTY	MPTY
H Hotel	AA COUNTY INTEROP NEW BWI AIRPORT	AAAL	AABR	AACH	AADE	AAEC	AAFO	AAGO	AAHO	AAIB	AAJU	AAKL	AALI	AAMB	BWT3	BWT1	BWDS
I India	BALTO COUNTY INTEROP	BCMN	BC4	BC22	BC23	BC52	BC53	BC2	BC12	BC13	BC62	BC3	BC32	BC33	BC42	BC43	BCMB
J Juliet	CARROLL COUNTY INTEROP	CC1	CC2	CC5	CC6	CC10	CC11	CC12	CC15	CC16	CC17	CC20	CC21	CC22	CC25	CC26	CC27
K Kilo	FREDERICK COUNTY INTEROP	FCMN	FC20	FC10	FC50	FC30	FC31	FC32	FC40	FC41	FC42	FC70	FC71	FC72	FC80	FC81	FC82
L Lima	MONTGOMERY COUNTY INTEROP	MC7A	MC7B	MC7C	MC7D	MC7E	MC7F	MC7G	MC7H	MC7I	MC7J	MC7K	MC7L	MC7M	MC7N	MC7O	MC7B
M Mike	BALTIMORE CITY	BFA2	BFA1	BFA3	BFA4	BFA5	BFA6	BFB1	BFB5	BFC1	BFC5	MPTY	MPTY	MPTY	MPTY	MPTY	BFA2
O Oscar	TAC - RMS - Non-Trunked Resources	8CLL	8TC1	8TC2	8TC3	8TC4	RHS1	RHS2	RHS3	RHS4	RHS5	RHS6	MPTY	MPTY	MPTY	VERSION	911
S Sierra	COUNTY	911	CRY1	CRY2	CRY3	EOC	COEX	BDEM	CALL HELP 911	8CLL	8TC1	8TC2	8TC3	8TC4	RHS1	FLT1	911

HOWARD COUNTY DEPARTMENT of FIRE & RESCUE SERVICES

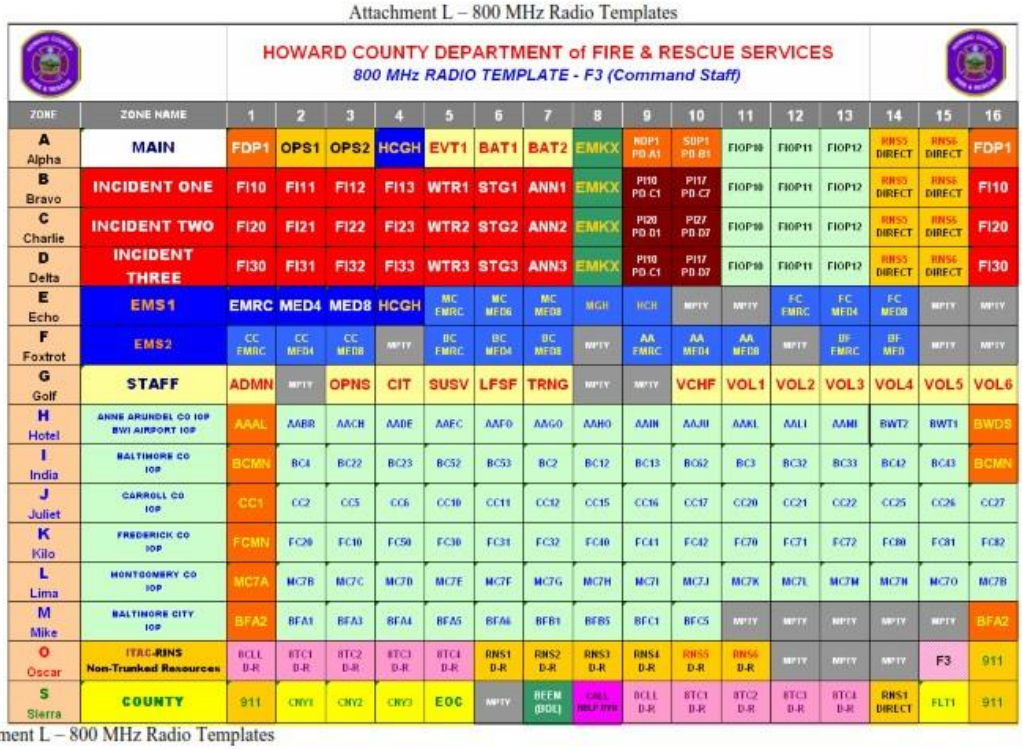
800 MHz RADIO TEMPLATE - F1 (Fire Chief)

ZONE	ZONE NAME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A Alpha	MAIN	FDP1	OPS1	OPS2	HCGH	EVT1	BAT1	BAT2	EMKX	XDP1 PD-A1	SDP1 PD-B1	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FDP1
B Bravo	INCIDENT ONE	FI10	FI11	FI12	FI13	WTR1	STG1	ANN1	EMKX	PI10 PD-C1	PI17 PD-C7	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FI10
C Charlie	INCIDENT TWO	FI20	FI21	FI22	FI23	WTR2	STG2	ANN2	EMKX	PI20 PD-D1	PI27 PD-D7	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FI20
D Delta	INCIDENT THREE	FI30	FI31	FI32	FI33	WTR3	STG3	ANN3	EMKX	PI10 PD-C1	PI17 PD-D7	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FI30
E Echo	EMS1	EMRC	MED4	MED8	HCGH	MC EMRC	MC MED6	MC MED8	MGH	HCH	MPTY	MPTY	FC EMRC	FC MED4	FC MED8	MPTY	MPTY
F Foxtrot	EMS2	CC EMRC	CC MED4	CC MED8	MPTY	BC EMRC	BC MED4	BC MED8	MPTY	AA EMRC	AA MED4	AA MED8	MPTY	BF EMRC	BF MED	MPTY	MPTY
G Golf	STAFF	ADMN	SRST	OPNS	CIT	SUSV	LFSF	TRNG	MPTY	MPTY	VCHF	VOL1	VOL2	VOL3	VOL4	VOL5	VOL6
H Hotel	ANNE ARUNDEL CO IOP BWI AIRPORT IOP	AAAL	AABR	AACH	AADE	AAEC	AAF0	AAG0	AAH0	AAIN	AAJ0	AAK1	AAL1	AAM1	BWT2	BWT1	BWDS
I India	BALTIMORE CO IOP	BCMN	BC1	BC22	BC23	BC52	BC53	BC2	BC12	BC13	BC62	BC3	BC32	BC33	BC42	BC43	BCMN
J Juliet	CARROLL CO IOP	CC1	CC2	CC5	CC6	CC10	CC11	CC12	CC15	CC16	CC17	CC20	CC21	CC22	CC25	CC26	CC27
K Kilo	FREDERICK CO IOP	FCMN	FC20	FC10	FC50	FC30	FC31	FC32	FC40	FC41	FC42	FC70	FC71	FC72	FC80	FC81	FC82
L Lima	MONTGOMERY CO IOP	MC7A	MC7B	MC7C	MC7D	MC7E	MC7F	MC7G	MC7H	MC7I	MC7J	MC7K	MC7L	MC7M	MC7N	MC7O	MC7B
M Mike	BALTIMORE CITY IOP	BFA2	BFA1	BFA3	BFA4	BFA5	BFA6	BFB1	BFB5	BFC1	BFC5	MPTY	MPTY	MPTY	MPTY	MPTY	BFA2
O Oscar	ITAC-RINS Non-Trunked Resources	BCLL D-R	BTC1 D-R	BTC2 D-R	BTC3 D-R	BTC4 D-R	RNS1 D-R	RNS2 D-R	RNS3 D-R	RNS4 D-R	RNS5 D-R	RNS6 D-R	MPTY	MPTY	MPTY	F1	911
S Sierra	COUNTY	911	CNY1	CNY2	CNY3	EOC	COEX	BEEM (DOI)	CALL HELP 800	BCLL D-R	BTC1 D-R	BTC2 D-R	BTC3 D-R	BTC4 D-R	RNS1 DIRECT	FLT1	911

HOWARD COUNTY DEPARTMENT of FIRE & RESCUE SERVICES

800 MHz RADIO TEMPLATE - F2 (Senior Staff)

ZONE	ZONE NAME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A Alpha	MAIN	FDP1	OPS1	OPS2	HCGH	EVT1	BAT1	BAT2	EMKX	NDP1 PD A1	SDP1 PD B1	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FDP1
B Bravo	INCIDENT ONE	FI10	FI11	FI12	FI13	WTR1	STG1	ANN1	EMKX	PI10 PD C1	PI17 PD C7	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FI10
C Charlie	INCIDENT TWO	FI20	FI21	FI22	FI23	WTR2	STG2	ANN2	EMKX	PI20 PD D1	PI27 PD D7	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FI20
D Delta	INCIDENT THREE	FI30	FI31	FI32	FI33	WTR3	STG3	ANN3	EMKX	PI10 PD C1	PI17 PD D7	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FI30
E Echo	EMS1	EMRC	MED4	MED8	HCGH	MC EMRC	MC MED6	MC MED8	MGH	HCH	MPTY	MPTY	FC EMRC	FC MED4	FC MED8	MPTY	MPTY
F Foxtrot	EMS2	CC EMRC	CC MED4	CC MED8	MPTY	BC EMRC	BC MED4	BC MED8	MPTY	AA EMRC	AA MED4	AA MED8	MPTY	BF EMRC	BF MED	MPTY	MPTY
G Golf	STAFF	ADMN	SRST	OPNS	CIT	SUSV	LFSF	TRNG	MPTY	MPTY	VCHF	VOL1	VOL2	VOL3	VOL4	VOL5	VOL6
H Hotel	ANNE ARUNDEL CO IOP BWI AIRPORT IOP	AAAL	AABR	AACH	AADF	AAFC	AAFO	AAGO	AAHO	AAIN	AAJU	AAKL	AALI	AAMI	BWT2	BWT1	BWDS
I India	BALTIMORE CO IOP	BCMN	BC1	BC22	BC23	BC52	BC53	BC2	BC12	BC13	BC62	BC3	BC32	BC33	BC42	BC43	BCMN
J Juliet	CARROLL CO IOP	CC1	CC2	CC5	CC6	CC10	CC11	CC12	CC15	CC16	CC17	CC20	CC21	CC22	CC25	CC26	CC27
K Kilo	FREDERICK CO IOP	FCMN	FC20	FC10	FC50	FC30	FC31	FC32	FC10	FC41	FC42	FC70	FC71	FC72	FC80	FC81	FC82
L Lima	MONTGOMERY CO IOP	MC7A	MC7B	MC7C	MC7D	MC7E	MC7F	MC7G	MC7H	MC7I	MC7J	MC7K	MC7L	MC7M	MC7N	MC7O	MC7B
M Mike	BALTIMORE CITY IOP	BFA2	BFA1	BFA3	BFA4	BFA5	BFA6	BFB1	BFB5	BFC1	BFC5	MPTY	MPTY	MPTY	MPTY	MPTY	BFA2
O Oscar	ITAC-RINS Non-Trunked Resources	BCLL D-R	BTC1 D-R	BTC2 D-R	BTC3 D-R	BTC4 D-R	RNS1 D-R	RNS2 D-R	RNS3 D-R	RNS4 D-R	RNS5 D-R	RNS6 D-R	MPTY	MPTY	MPTY	F2	911
S Sierra	COUNTY	911	CNY1	CNY2	CNY3	EOC	MPTY	BEEM (BIDL)	CALL HELP ITAC	BCLL D-R	BTC1 D-R	BTC2 D-R	BTC3 D-R	BTC4 D-R	RNS1 DIRECT	FLT1	911

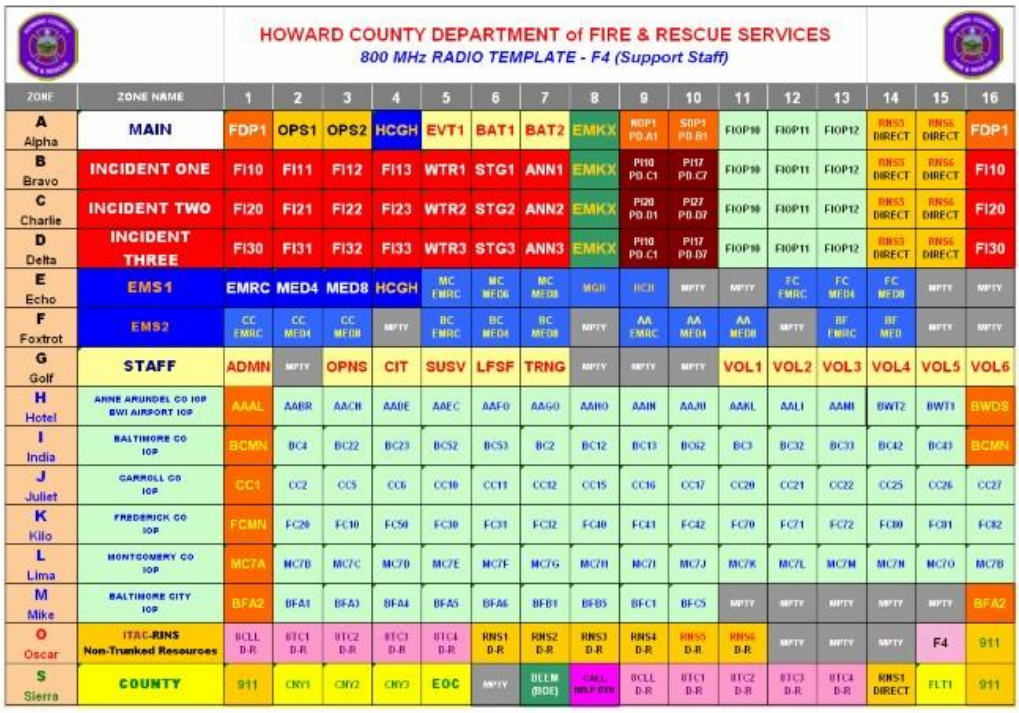


HOWARD COUNTY DEPARTMENT of FIRE & RESCUE SERVICES

800 MHz RADIO TEMPLATE - F3 (Command Staff)

ZONE	ZONE NAME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A Alpha	MAIN	FDP1	OPS1	OPS2	HCGH	EVT1	BAT1	BAT2	EMKX	NDP1 PD A1	SDP1 PD B1	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FDP1
B Bravo	INCIDENT ONE	FI10	FI11	FI12	FI13	WTR1	STG1	ANN1	EMKX	PI10 PD C1	PI17 PD C7	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FI10
C Charlie	INCIDENT TWO	FI20	FI21	FI22	FI23	WTR2	STG2	ANN2	EMKX	PI20 PD D1	PI27 PD D7	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FI20
D Delta	INCIDENT THREE	FI30	FI31	FI32	FI33	WTR3	STG3	ANN3	EMKX	PI10 PD C1	PI17 PD D7	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FI30
E Echo	EMS1	EMRC	MED4	MED8	HCGH	MC EMRC	MC MED6	MC MED8	MGH	HCH	MPTY	MPTY	FC EMRC	FC MED4	FC MED8	MPTY	MPTY
F Foxtrot	EMS2	CC EMRC	CC MED4	CC MED8	MPTY	BC EMRC	BC MED4	BC MED8	MPTY	AA EMRC	AA MED4	AA MED8	MPTY	BF EMRC	BF MED	MPTY	MPTY
G Golf	STAFF	ADMN	MPTY	OPNS	CIT	SUSV	LFSF	TRNG	MPTY	MPTY	VCHF	VOL1	VOL2	VOL3	VOL4	VOL5	VOL6
H Hotel	ANNE ARUNDEL CO IOP BWI AIRPORT IOP	AAAL	AABR	AACH	AADF	AAFC	AAF0	AAG0	AAH0	AAIN	AAJU	AAKL	AALI	AAMI	BWT2	BWT1	BWDS
I India	BALTIMORE CO IOP	BCMN	BC1	BC22	BC23	BC52	BC53	BC2	BC12	BC13	BC62	BC3	BC32	BC33	BC42	BC43	BCMN
J Juliet	CARROLL CO IOP	CC1	CC2	CC5	CC6	CC10	CC11	CC12	CC15	CC16	CC17	CC20	CC21	CC22	CC25	CC26	CC27
K Kilo	FREDERICK CO IOP	FCMN	FC20	FC10	FC50	FC30	FC31	FC32	FC10	FC41	FC42	FC70	FC71	FC72	FC80	FC81	FC82
L Lima	MONTGOMERY CO IOP	MC7A	MC7B	MC7C	MC7D	MC7E	MC7F	MC7G	MC7H	MC7I	MC7J	MC7K	MC7L	MC7M	MC7N	MC7O	MC7B
M Mike	BALTIMORE CITY IOP	BFA2	BFA1	BFA3	BFA4	BFA5	BFA6	BFB1	BFB5	BFC1	BFC5	MPTY	MPTY	MPTY	MPTY	MPTY	BFA2
O Oscar	ITAC-RINS Non-Trunked Resources	BCLL D-R	BTC1 D-R	BTC2 D-R	BTC3 D-R	BTC4 D-R	RNS1 D-R	RNS2 D-R	RNS3 D-R	RNS4 D-R	RNS5 D-R	RNS6 D-R	MPTY	MPTY	MPTY	F3	911
S Sierra	COUNTY	911	CNY1	CNY2	CNY3	EOC	MPTY	REEM (DOL)	CALL HELP ITAC	BCLL D-R	BTC1 D-R	BTC2 D-R	BTC3 D-R	BTC4 D-R	RNS1 DIRECT	FLT1	911

Attachment L – 800 MHz Radio Templates



HOWARD COUNTY DEPARTMENT of FIRE & RESCUE SERVICES

800 MHz RADIO TEMPLATE - F4 (Support Staff)

ZONE	ZONE NAME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A Alpha	MAIN	FDP1	OPS1	OPS2	HCGH	EVT1	BAT1	BAT2	EMKX	MDP1 PD.A1	SDP1 PD.B1	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FDP1
B Bravo	INCIDENT ONE	FI10	FI11	FI12	FI13	WTR1	STG1	ANN1	EMKX	PI10 PD.C1	PI17 PD.C7	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FI10
C Charlie	INCIDENT TWO	FI20	FI21	FI22	FI23	WTR2	STG2	ANN2	EMKX	PI20 PD.D1	PI27 PD.D7	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FI20
D Delta	INCIDENT THREE	FI30	FI31	FI32	FI33	WTR3	STG3	ANN3	EMKX	PI10 PD.C1	PI17 PD.D7	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FI30
E Echo	EMS1	EMRC	MED4	MED8	HCGH	MC EMRC	MC MED6	MC MED8	MGH	HCH	MPTY	MPTY	FC EMRC	FC MED4	FC MED8	MPTY	MPTY
F Foxtrot	EMS2	CC EMRC	CC MED4	CC MED8	MPTY	BC EMRC	BC MED4	BC MED8	MPTY	AA EMRC	AA MED4	AA MED8	MPTY	BF EMRC	BF MED	MPTY	MPTY
G Golf	STAFF	ADMN	MPTY	OPNS	CIT	SUSV	LFSF	TRNG	MPTY	MPTY	MPTY	VOL1	VOL2	VOL3	VOL4	VOL5	VOL6
H Hotel	ANNE ARUNDEL CO IOP BWI AIRPORT IOP	AAAL	AABR	AACH	AADE	AAEC	AAFO	AAGO	AAHO	AAIN	AAJH	AAKL	AALI	AAMI	BWT2	BWT1	BWDS
I India	BALTIMORE CO IOP	BCMN	BC4	BC22	BC23	BC52	BC53	BC2	BC12	BC13	BC62	BC3	BC32	BC33	BC42	BC43	BCMN
J Juliet	CARROLL CO IOP	CC1	CC2	CC5	CC6	CC10	CC11	CC12	CC15	CC16	CC17	CC20	CC21	CC22	CC25	CC26	CC27
K Kilo	FREDERICK CO IOP	FCMN	FC20	FC10	FC50	FC30	FC31	FC32	FC40	FC41	FC42	FC70	FC71	FC72	FC80	FC81	FC82
L Lima	MONTGOMERY CO IOP	MC7A	MC7B	MC7C	MC7D	MC7E	MC7F	MC7G	MC7H	MC7I	MC7J	MC7K	MC7L	MC7M	MC7N	MC7O	MC7B
M Mike	BALTIMORE CITY IOP	BFA2	BFA1	BFA3	BFA4	BFA5	BFA6	BFB1	BFB5	BFC1	BFC5	MPTY	MPTY	MPTY	MPTY	MPTY	BFA2
O Oscar	ITAC-RINS Non-Trunked Resources	BCLL D-R	BTC1 D-R	BTC2 D-R	BTC3 D-R	BTC4 D-R	RNS1 D-R	RNS2 D-R	RNS3 D-R	RNS4 D-R	RNS5 D-R	RNS6 D-R	MPTY	MPTY	MPTY	F4	911
S Sierra	COUNTY	911	CNY1	CNY2	CNY3	EOC	MPTY	BELM (BOE)	CALL HELP CYB	BCLL D-R	BTC1 D-R	BTC2 D-R	BTC3 D-R	BTC4 D-R	RNS1 DIRECT	FLT1	911

HOWARD COUNTY DEPARTMENT of FIRE & RESCUE SERVICES

800 MHz RADIO TEMPLATE - F5 (Field Operations)

ZONE	ZONE NAME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A Alpha	MAIN	FDP1	OPS1	OPS2	HCGH	EVT1	BAT1	BAT2	EMKX	MPTY	MPTY	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FDP1
B Bravo	INCIDENT ONE	FI10	FI11	FI12	FI13	WTR1	STG1	ANN1	EMKX	PI10 PD C1	PI17 PD C7	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FI10
C Charlie	INCIDENT TWO	FI20	FI21	FI22	FI23	WTR2	STG2	ANN2	EMKX	PI20 PD D1	PI27 PD D7	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FI20
D Delta	INCIDENT THREE	FI30	FI31	FI32	FI33	WTR3	STG3	ANN3	EMKX	PI10 PD C1	PI17 PD D7	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FI30
E Echo	EMS1	EMRC	MED4	MED8	HCGH	MC EMRC	MC MED6	MC MED8	MGH	HCH	MPTY	MPTY	FC EMRC	FC MED4	FC MED8	MPTY	MPTY
F Foxtrot	EMS2	CC EMRC	CC MED4	CC MED8	MPTY	BC EMRC	BC MED4	BC MED8	MPTY	AA EMRC	AA MED4	AA MED8	MPTY	BF EMRC	BF MED	MPTY	MPTY
G Golf	STAFF	MPTY	MPTY	MPTY	MPTY	MPTY	MPTY	MPTY	MPTY	MPTY	MPTY	VOL1	VOL2	VOL3	VOL4	VOL5	VOL6
H Hotel	ANNE ARUNDEL CO IOP BWI AIRPORT IOP	AAAL	AABR	AACH	AADE	AAEC	AAFO	AAGO	AAHO	AAIN	AAJU	AAKL	AALI	AAMI	BWT2	BWT1	BWDS
I India	BALTIMORE CO IOP	BCMN	BC4	BC22	BC23	BC52	BC53	BC2	BC12	BC13	BC62	BC3	BC32	BC33	BC42	BC43	BCMN
J Juliet	CARROLL CO IOP	CC1	CC2	CC5	CC6	CC10	CC11	CC12	CC15	CC16	CC17	CC20	CC21	CC22	CC25	CC26	CC27
K Kilo	FREDERICK CO IOP	FCMN	FC20	FC10	FC50	FC30	FC31	FC32	FC10	FC41	FC42	FC70	FC71	FC72	FC80	FC81	FC82
L Lima	MONTGOMERY CO IOP	MC7A	MC7B	MC7C	MC7D	MC7E	MC7F	MC7G	MC7H	MC7I	MC7J	MC7K	MC7L	MC7M	MC7N	MC7O	MC7B
M Mike	BALTIMORE CITY IOP	BFA2	BFA1	BFA3	BFA4	BFA5	BFA6	BFB1	BFB5	BFC1	BFC5	MPTY	MPTY	MPTY	MPTY	MPTY	BFA2
O Oscar	ITAC-RINS Non-Trunked Resources	BCLL D-R	BTC1 D-R	BTC2 D-R	BTC3 D-R	BTC4 D-R	RNS1 D-R	RNS2 D-R	RNS3 D-R	RNS4 D-R	RNS5 D-R	RNS6 D-R	MPTY	MPTY	MPTY	F5	911
S Sierra	COUNTY	911	CNY1	CNY2	CNY3	EOC	MPTY	REEM (DOL)	CALL HELP ITAC	BCLL D-R	BTC1 D-R	BTC2 D-R	BTC3 D-R	BTC4 D-R	RNS1 DIRECT	FLT1	911

HOWARD COUNTY DEPARTMENT of FIRE & RESCUE SERVICES

800 MHz RADIO TEMPLATE - F6 (Arson)

ZONE	ZONE NAME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A Alpha	MAIN	FDP1	OPS1	OPS2	HCGH	EVT1	BAT1	BAT2	EMKX	NDP1 PD-A1	SDP1 PD-B1	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FDP1
B Bravo	INCIDENT ONE	FI10	FI11	FI12	FI13	WTR1	STG1	ANN1	EMKX	PI10 PD-C1	PI17 PD-C7	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FI10
C Charlie	INCIDENT TWO	FI20	FI21	FI22	FI23	WTR2	STG2	ANN2	EMKX	PI20 PD-D1	PI27 PD-D7	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FI20
D Delta	INCIDENT THREE	FI30	FI31	FI32	FI33	WTR3	STG3	ANN3	EMKX	PI30 PD-C1	PI37 PD-D7	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FI30
E Echo	EMS1	EMRC	MED4	MED8	HCGH	MC EMRC	MC MED6	MC MED8	MGH	HCH	MPTY	MPTY	FC EMRC	FC MED4	FC MED8	MPTY	MPTY
F Foxtrot	EMS2	CC EMRC	CC MED4	CC MED8	MPTY	BC EMRC	BC MED4	BC MED8	MPTY	AA EMRC	AA MED4	AA MED8	MPTY	BF EMRC	BF MED	MPTY	MPTY
G Golf	STAFF	ADMN	MPTY	OPNS	CIT	SUSV	LFSF	TRNG	MPTY	MPTY	VCHF	VOL1	VOL2	VOL3	VOL4	VOL5	VOL6
AR ARSON	ARSON	ARSN PD-E8	CIR1 PD-A10	CIR2 PD-A11	CID1 PD-E1	CID2 PD-E2	MPTY	MPTY	MPTY	MPTY	MPTY	MPTY	MPTY	MPTY	MPTY	MPTY	MPTY
H Hotel	ANNE ARUNDEL CO IOP BWI AIRPORT IOP	AAAL	AABR	AACH	AADE	AAEC	AAFO	AAGO	AAHO	AAIN	AAJU	AAKL	AALI	AAMI	BWT2	BWT1	BWDS
I India	BALTIMORE CO IOP	BCMN	BC4	BC22	BC23	BC52	BC53	BC2	BC12	BC13	BC62	BC3	BC32	BC33	BC42	BC43	BCMN
J Juliet	CARROLL CO IOP	CC1	CC2	CC5	CC6	CC10	CC11	CC12	CC15	CC16	CC17	CC20	CC21	CC22	CC25	CC26	CC27
K Kilo	FREDERICK CO IOP	FCMN	FC20	FC10	FC50	FC30	FC31	FC32	FC40	FC41	FC42	FC70	FC71	FC72	FC80	FC81	FC82
L Lima	MONTGOMERY CO IOP	MC7A	MC7B	MC7C	MC7D	MC7E	MC7F	MC7G	MC7H	MC7I	MC7J	MC7K	MC7L	MC7M	MC7N	MC7O	MC7B
M Mike	BALTIMORE CITY IOP	BFA2	BFA1	BFA3	BFA4	BFA5	BFA6	BFB1	BFB5	BFC1	BFC5	MPTY	MPTY	MPTY	MPTY	MPTY	BFA2
O Oscar	ITAC-RINS Non-Trunked Resources	BCLL D-R	BTC1 D-R	BTC2 D-R	BTC3 D-R	BTC4 D-R	RNS1 D-R	RNS2 D-R	RNS3 D-R	RNS4 D-R	RNS5 D-R	RNS6 D-R	MPTY	MPTY	MPTY	F6	911
S Sierra	COUNTY	911	CNY1	CNY2	CNY3	EOC	MPTY	BEEM (BOE)	CALL HELP RNS	BCLL D-R	BTC1 D-R	BTC2 D-R	BTC3 D-R	BTC4 D-R	RNS1 DIRECT	FLT1	911

HOWARD COUNTY DEPARTMENT of FIRE & RESCUE SERVICES

800 MHz RADIO TEMPLATE - F7 (Support Staff Non-Essential)

ZONE	ZONE NAME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A Alpha	MAIN	FDP1	OPS1	OPS2	HCGH	EVT1	BAT1	BAT2	EMKX	NDP1 PD-A1	SDP1 PD-B1	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FDP1
B Bravo	INCIDENT ONE	FI10	FI11	FI12	FI13	WTR1	STG1	ANN1	EMKX	PI10 PD-C1	PI17 PD-C7	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FI10
C Charlie	INCIDENT TWO	FI20	FI21	FI22	FI23	WTR2	STG2	ANN2	EMKX	PI20 PD-D1	PI27 PD-D7	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FI20
D Delta	INCIDENT THREE	FI30	FI31	FI32	FI33	WTR3	STG3	ANN3	EMKX	PI10 PD-C1	PI17 PD-D7	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FI30
E Echo	EMS1	EMRC	MED4	MED8	HCGH	MC EMRC	MC MED6	MC MED8	MGH	HCH	MPTY	MPTY	FC EMRC	FC MED4	FC MED8	MPTY	MPTY
F Foxtrot	EMS2	CC EMRC	CC MED4	CC MED8	MPTY	DC EMRC	DC MED4	DC MED8	MPTY	AA EMRC	AA MED4	AA MED8	MPTY	DF EMRC	DF MED	MPTY	MPTY
G Golf	STAFF	ADMN	MPTY	OPNS	CIT	SUSV	LFSF	TRNG	MPTY	MPTY	VCHF	VOL1	VOL2	VOL3	VOL4	VOL5	VOL6
O Oscar	ITAC-RINS Non-Trunked Reseurees	BCLL D.R	BTC1 D.R	BTC2 D.R	BTC3 D.R	BTC4 D.R	RNS1 D.R	RNS2 D.R	RNS3 D.R	RNS4 D.R	RNS5 D.R	RNS6 D.R	MPTY	MPTY	MPTY	F7	911
S Sierra	COUNTY	911	CNY1	CNY2	CNY3	EOC	MPTY	BEEM (BOE)	CALL HELP DYK	BCLL D.R	BTC1 D.R	BTC2 D.R	BTC3 D.R	BTC4 D.R	RNS1 DIRECT	FLT1	911

HOWARD COUNTY DEPARTMENT of FIRE & RESCUE SERVICES

800 MHz RADIO TEMPLATE - F8 (JHU Applied Physics Lab)

ZONE	ZONE NAME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A Alpha	MAIN	FDP1	OPS1	OPS2	HCGH	EVT1	BAT1	BAT2	EMKX	NDP1 PD A1	SDP1 PD B1	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FDP1
B Bravo	INCIDENT ONE	FI10	FI11	FI12	FI13	WTR1	STG1	ANN1	EMKX	PI10 PD C1	PI17 PD C7	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FI10
C Charlie	INCIDENT TWO	FI20	FI21	FI22	FI23	WTR2	STG2	ANN2	EMKX	PI20 PD D1	PI27 PD D7	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FI20
D Delta	INCIDENT THREE	FI30	FI31	FI32	FI33	WTR3	STG3	ANN3	EMKX	PI10 PD C1	PI17 PD D7	FIOP10	FIOP11	FIOP12	RNS5 DIRECT	RNS6 DIRECT	FI30
E Echo	EMS1	EMRC	MED4	MED8	HCGH	MPTY	MPTY	MPTY	MPTY	MPTY	MPTY	MPTY	MPTY	MPTY	MPTY	MPTY	MPTY
O Oscar	ITAC-RINS Non-Trunked Resources	BCLL D-R	BTC1 D-R	BTC2 D-R	BTC3 D-R	BTC4 D-R	RNS1 D-R	RNS2 D-R	RNS3 D-R	RNS4 D-R	RNS5 D-R	RNS6 D-R	MPTY	MPTY	MPTY	F8	911
S Sierra	COUNTY	911	CNY1	CNY2	CNY3	EOC	MPTY	BEEM (BOL)	CALL HELP BTN	BCLL D-R	BTC1 D-R	BTC2 D-R	BTC3 D-R	BTC4 D-R	RNS1 DIRECT	FLT1	911

DFRS Staff Notification Criteria

(Alpha Paging is the Preferred Method of Staff Notification[1])

STAFF OFFICER / GROUP / EVENT	FIRE GROUP	FIRE CHIEF	CHIEF DEPUTY	D/C OPNS	D/C COMM / IT	D/C SUPP SERV	D/C LIFE SAFTEY	B/C EXEC. OFF.	PIO	B/C SAFETY	VOL. FIRE CHIEF	PRES. LOCAL 2000	CHAPLAIN	CISM
RADIO ID (UNIT)		*1*	*2*	*3*	*4*	*5*	*6*	*100*	*40*	*305*				
Job related firefighter death or life-threatening injury	X	R	R	R	R	R	R	R	R	R	X	X	R	X
Job related firefighter injury (requiring medical treatment)	X	R	R	R				R	R	R	X	X		
Off-duty firefighter death or serious injury		R	R	R	R	R	R	X	X	R	X	X	X	X
Civilian death or injury as a result of fire		R	X	R	X	X	X		X		X		X	X
Working fire or incident[2]	X	X	X	X					X	X				
DRFS vehicle involved in accident		R		R				X	R	R	X[3]			
Severe weather information	X													
Blue alert	X													

Explanatory Detail:

X Notification is made by Communications.

R Notification is made by Communications, **Telephone Response Required**. DFRS personnel should respond within 15 minutes.

1 Alpha paging is the preferred method of DFRS staff notification. If the alpha paging system is known to be down or Communications personnel did not receive a response from DFRS personnel who are required to reply to a page, then Communications personnel shall handle notification using the tone paging system.

2 First notification is made when unit arrives on scene and advises of a working incident. Minimum updates thereafter should be: first status report, fire under control, and all units clear.

3 If the vehicle is assigned to a volunteer station (Stations 1, 2, 3, 4, 5, 6, or 8) then the appropriate volunteer chief shall be notified.

Attachment M – DFRS Staff Notification Criteria

To accomplish DFRS Staff Notification the following procedure shall be used:

Use FD paging groups from within the CAD Messaging Service as shown in the "**Using the CAD Messaging Feature to accomplish DFRS Staff Notification"** section that follows.
If a response is **NOT** received from DFRS personnel who are to call-in to confirm they have received the page then Communications personnel shall initiate individual alpha pages to those personnel who did not reply and request they contact Communications immediately.
If personnel have not replied to a direct page or the paging system does not appear to be functioning properly then Communications shall handle staff notification using the tone paging system.

Using the CAD Messaging Feature to accomplish DFRS Staff Notification

DFRS paging notification requirements can be met by using the following CAD Message Groups. An "X" indicates which groups should be paged from within CAD to accomplish appropriate notification. The "OTHER PAGES" section indicates additional paging that must be done to meet DFRS paging requirements for the particular event.

CAD Paging Group / Event	FD-CFS 2,4,5,6	FD-CHAPLAINS	FD-FFINJ/DEATH	FD-PIO	FD-SAFETY	FD-SR STAFF	FD-WORKING INC	FD-MVA	FD-CISM	OTHER PAGES
Job related firefighter death or life-threatening injury.			X							Volunteer Chiefs 1 and 3, and the Fire Group For Volunteer Chief 2 use Sta. 2 Fire Tone
Job related firefighter injury (requiring medical treatment)			X							Volunteer Chiefs 1 and 3, and the Fire Group
Off-duty firefighter death or serious injury			X							Volunteer Chiefs 1 and 3
Civilian death or injury as a result of fire	X	X		X		X			X	Volunteer Chiefs 1 and 3
Working fire or incident							X			
DFRS vehicle involved in accident								X		Volunteer Chiefs 1 and 3 For Volunteer Chief 2 use Sta. 2 Fire Tone
Severe weather information							X			
Blue alert							X			

Attachment N – Fail Soft Chart

Fail Soft Talk Group Frequency Assignments - All Digital Except Channel 6

Channel 1 Police	Channel 2 Police	Channel 3 Police	Channel 4 Police	Channel 5 Police	Channel 6 Fire & Rescue Analog	Channel 7 Fire & Rescue	Channel 8 Fire & Rescue	Channel 9 Fire & Rescue	Channel 10 Public Works	Channel 11 Public Works	Channel 12 General Government	Channel 13 General Government	Channel 14 County Executive	Channel 15 Communications	Not Assigned
868.86250	868.03750	867.00000	867.63750	867.11250	866.98750	866.36250	866.68750	866.37500	866.53750	866.38750	866.86250	866.83750	867.73750	857.23750	
CB	NDP1	SDP1	P110	P20	FDP1	F10	F20	F30	FADM	EVAD	SHAD	FLT1	EXC1	911	VOL1
VAN1	NDP2	SDP2	P111	P21	OPS1	F11	F21	F31	FAC1	CLOP	SHCS	FLAD	ADM1	CNY1	VOL2
VAN2	PAT1	PAT6	P112	P22	OPS2	F12	F22	F32	FAC2	FDOP	SHOP	PPAD	ADM2	CNY2	VOL3
CD1	PAT2	PAT7	P114	P24	HCGH	F13	F23	F33	FAC3	LDFL	SHT1	PKOP	ADM3	CNY3	VOL4
CD2	PAT3	PAT8	P115	P25	EMKI	WTR1	WTR2	WTR3	DPW1	ACTI	SHT2	RCOP		DOC	VOL5
WARR	PAT4	PAT9	P116	P26	BAT1	STG1	STG2	STG3	UTOP	HWAD	CPAD	PKSP		COEX	VOL6
STAFF	PAT5		P117	P27	BAT2			ADMN	UT2	HWE1	CPSD	RCE1		DTCS	P119
IAD	NSP1		P118	P28	FIOP10			SRST	UT3	HWE2	CPOP	RCE2		BSSO	P29
ARSN	SOB1				FIOP11			OPNS	WWTP	HWC1	CPTR	BEAD		COM1	EMRC
TSS	SOB2				FIOP12			CIT	UTAD	HWC2		BEOP		COM2	MED4
TES	CB1				FIOP1			SUSV	EDUR	HWW1		BEEN		COM3	MED8
TAC	CB2				FIOP2			TRNG	ECIE	HWW2		BEI1		COM4	ANN1
SRO	AC1				HEALTH			VCHP	ECIC	HWTF		BEC		DSP1	ANN2
	NSP2							LFST	ECIW	HWCO		BCMT		DSP2	ANN3
								EVTI	EADM	SHAI		BETF			WFU1
												HSNG			WFU2
												PZAD			CITY
												HTAD			LOST
												HTFX			FR ANN GRP
												HTPA			CANN
												HCTC			PD ANN GRP
															SG ANN GRP
															FUTURE2
															FUTURE3
															FUTURE4
															FUTURE5
															FUTURE6
															FUTURE7
															FUTURE8
															FUTURE32
															FUTURE33
															SANN
															FREAKBK

General Order 500.01: Annual Service Testing and Inspections

DEPARTMENT OF FIRE AND RESCUE SERVICES

GENERAL ORDER

500.01

Originating From	Issue Date	Revision Date	Attachments
Support Services	**12/10/1995**	**N/A**	**N/A**

SUBJECT: Annual Service Testing and Inspections
APPLICABILITY: All Personnel

POLICY:
Service testing and inspections, as a minimum, shall be conducted annually to insure that all equipment and apparatus in the Howard County Department of Fire and Rescue Services (DFRS) is in a constant state of operational readiness. This annual procedure shall help minimize equipment failure and increase safe and efficient operations during emergency incidents

1 General

1.1 All equipment and apparatus shall be tested and/or inspected annually to ensure proper operational safety. More frequent testing/inspections may be required for certain equipment as stated in this procedure.

1.2 All equipment and apparatus shall be tested and/or inspected after any suspected damage or extensive repairs.

1.3 All equipment and apparatus will be tested in accordance with NFPA standards or manufacturer recommendations.

1.4 Testing and inspections shall be conducted each spring during the months of March, April, and May, unless otherwise stated.

1.5 Apparatus or equipment that fails any portion of the service test will be placed out of service. Repairs, if appropriate, will be accomplished in a timely manner.

1.6 Failed apparatus or equipment shall be retested after repairs have been completed prior to returning to full performance emergency service.

1.7 An annual inventory shall be conducted of all equipment carried, to verify there are no Aunauthorized devices@ present.

1.8 A preventative maintenance program shall be in place for all apparatus and equipment in accordance with manufacturers' recommendations, DOT regulations and/or applicable NFPA standards

2 Equipment Requiring Annual Testing and/or Inspection:

2.1 Fire Service Pumps

2.1.1 Shall be conducted in accordance with NFPA 1911.

2.2 Hose

2.2.1 Shall be conducted in accordance with NFPA 1962, Chapter 5.

2.2.2 All new hose will be tested prior to being placed in service.

2.2.3 All Fire Service Hose that has any suspected damage or has been repaired will be service-tested prior to returning to emergency operations.

2.3 Rope, Life Safety Harnesses and Hardware

2.3.1 There is no approved method to service-test rope without compromising its strength. The DFRS shall use only NEW rope for rescue work.

2.3.2 Rope and accessories shall be inspected and/or removed from service in accordance with NFPA 1983, sec. 3.6 and manufacturer recommendations.

2.3.3 Life Safety Rope shall be downgraded after any use and altered in such a manner to prevent future accidental emergency service.

2.3.4 Training Ropes will be scheduled for replacement at regular intervals. Training Rope shall be destroyed after signs of wear, damage or impact loading.

2.4 Ground Ladders

2.4.1 Shall be tested in accordance with NFPA 1932.

2.4.2 Strength Service-testing and Hardness Testing of ground ladders will be conducted by an independent ladder-testing vendor. Interpretation of non-destructive test results must be performed only by certified personnel.

2.4.3 Testing agencies will provide certification documents stating that their personnel meet the American Society of Non-destructive Testing Requirements.

2.4.4 All Ground Ladders will be identified by: Serial Number, where applicable, and engraved on the beam with the unit radio identification number followed by the number 1, 2 or 3 (example: 21-1 = 35' 3-section ladder).

2.4.5 Heat Sensor Labels will be checked after every use. If a change in the label is noted, the ground ladder shall be removed from service and tested prior to returning to operational use.

2.5 Aerial Ladders and Elevating Platforms

2.5.1 All Aerial Ladders and Aerial Tower Apparatus will be tested in accordance with NFPA Standard 1914.

2.5.2 The inspections and tests will be performed by an independent vendor. Those selected vendors shall comply with the American Society for Testing and Materials Standard E543.

2.6 Breathing Apparatus and Cascade Systems, Pass Devices

2.6.1 SCBA of the open circuit design shall be positive pressure and shall meet the performance requirements of NFPA Standard 1981.

2.6.2 Compressed Breathing Air shall meet the requirements of the Compressed Gas Association G-7.1, Commodity Specification for Air, with a minimum air quality of Grade E, with a Dew Point greater than -55EF.

2.6.3 Sources of Compressed Breathing Air such as air compressors and cascade systems shall be tested every 3 months to assure compliance with Section 2.6.2.

2.6.4 SCBA Cylinders shall be hydrostatically tested according to applicable Federal Standards.

2.6.5 Annual performance testing and inspection of SCBA regulators shall be conducted in accordance with manufacturer specifications.

2.6.6 PASS devices shall be inspected and maintained according to manufacturer recommendations. Batteries shall be changed annually or when needed.

2.7 Air Quality Monitoring Devices/Explosive Meter

2.7.1 Monitoring devices shall be calibrated, inspected, and maintained according to manufacturer recommendations.

2.8 Portable Fire Extinguishers

2.8.1 Shall be inspected annually by a certified private vendor according to NFPA 10. This shall include vehicle mounted and station mounted units.

2.9 All Emergency Vehicles

2.9.1 All DFRS vehicles shall be maintained and inspected in accordance with established DFRS periodic maintenance and inspection procedures and with the Motor Vehicle Administration, Commercial Vehicle Inspections Division.

2.10 Boats

2.10.1 DFRS boats shall be maintained and equipped in compliance with Department of Natural Resources regulations.

2.11 Generators, Gas/Pneumatic/Hydraulic Tools and Miscellaneous Equipment

2.11.1 Shall be inspected annually and maintained according to manufacturer recommendations.

2.12 EMS Equipment

2.12.1 Ambulances, oxygen regulating equipment and related miscellaneous EMS equipment shall be inspected/tested every three years by a representative from MIEMS. The inspection/certification process shall be in accordance with the Maryland Voluntary Ambulance Inspection Program (VAIP).

2.12.2 An annual inventory shall be conducted of all equipment carried, to verify there are no Aunauthorized devices@ present.

2.12.3 Medical Defibrillators shall be inspected/maintained according to manufacturer specifications and MIEMSS.

2.12.4 Mechanical CPR devices shall be inspected/calibrated according to manufacturer specifications.

3 Records

3.1 Appropriate records of tests and maintenance shall be maintained at each station.

3.2 Annual service test results shall be forwarded to the Deputy Chief of Operations in a timely manner.

Approved:

Joseph A. Herr
Fire Chief

General Order 510.03: Vehicle Maintenance and Repair

DEPARTMENT OF FIRE AND RESCUE SERVICES

GENERAL ORDER

510.03

Originating From	Issue Date	Revision Date	Attachments
Support Services	**3/07/2002**	**N/A**	**A-C**

SUBJECT: Vehicle Maintenance and Repair
APPLICABILITY: All Personnel

POLICY:
All vehicles owned by Howard County shall be maintained according to the standards in this order via a cooperative effort between the Howard County Department of Fire and Rescue Services (DFRS) personnel and county shop personnel. Volunteer corporations utilizing vendors other than the county shop for vehicle maintenance shall uphold county-owned vehicles to these standards and adhere to these reporting procedures. Volunteer corporations owning their own apparatus are expected to maintain their vehicles in a safe condition.

1 DFRS personnel shall be responsible in part for both the maintenance and minor repair of county-owned vehicles.

1.1 Daily and weekly checks shall be performed by the vehicle's assigned driver/operator in accordance with the DOT and COMAR inspection standard and then recorded on the appropriate DFRS check sheet. **(See attachments A-C).**

1.2 Daily and weekly checks on reserve and detail apparatus shall be performed and recorded by personnel in the station where the apparatus is currently housed.

1.3 DFRS personnel shall be responsible for ensuring that vehicles under their purview are scheduled for preventive maintenance as outlined in Section 2 below.

1.3.1 Preventive maintenance for vehicles assigned in the field is to be scheduled by the company captain.
1.3.2 Preventive maintenance for staff vehicles is to be scheduled by the Fleet Maintenance Division upon input from the vehicle's driver/operator.

1.4 DFRS personnel shall be responsible for maintaining the vehicle in the following areas between scheduled service intervals:

1.4.1 Ensure proper fluid levels;
1.4.2 Ensure sufficient lubrication of aerial ladders. To this end, station personnel shall lubricate the ladder slides according to the vehicle owner's manual on the first Monday of each month;
1.4.3 Ensure sufficient lubrication of door hinges and locks. To this end, station personnel shall lubricate these devices on the first Monday of each month with

WD-40;

1.4.4 Ensure sufficient lubrication of keystone valves, gated intakes and 6" caps. To this end, station personnel shall remove and lubricate the threading of the devices with white lithium grease on the first Monday of each month.

1.5 DFRS personnel may attempt minor vehicle repairs which include, but are not limited to:

1.5.1 Replacement of light bulbs;
1.5.2 Replacement of light lenses or assemblies;
1.5.3 Replacement of siren/dimmer switches;
1.5.4 Replacement of wiper blades;
1.5.5 Replacement of petcock drain valves;
1.5.6 Replacement of broken mirrors;
1.5.7 Cleaning of battery terminals.

1.6 DFRS personnel shall not adjust brakes or attempt repairs of brakes on any vehicle. County shop personnel shall be solely responsible for the maintenance of braking systems.

1.7 An annual evaluation shall be performed on each major piece of county-owned apparatus by the personnel assigned to maintenance where the apparatus is currently housed. This evaluation will determine the overall condition of the vehicle.

2 Requests for routine maintenance and repairs shall be scheduled using the Vehicle Maintenance Request form (attachment A-C).

2.1 The Company Captain or his/her designee shall schedule routine work for field units normally used by that station.

2.2 Requests for vehicle repairs shall be initiated by the on duty shift.

2.3 Maintenance and repairs request for Staff vehicles will be handled by the Fleet Maintenance Division.

2.4 The maintenance/repair request shall be forwarded to the repair facility with the vehicle.

2.5 Shop personnel will check off work completed on the unit and return the form with the apparatus.

2.6 The Company Captain or his/her designee shall properly file the completed repair

request.

3 County shop personnel shall be responsible for the maintenance and repair of county-owned vehicles based on the following schedule:

3.1 Group I Vehicles - Cars, Utilities, Brush Units

3.1.1 Every 3,000 miles
- 3.1.1.1 Change oil and filter
- 3.1.1.2 Check transmission fluid level
- 3.1.1.3 Replace the fuel filter
- 3.1.1.4 Align the front end
- 3.1.1.5 Inspection and adjust brakes
- 3.1.1.6 Lubricate the chassis
- 3.1.1.7 Perform all work required by the vehicle manufacture at the various vehicle mileage.

3.1.2 Each April and October
- 3.1.2.1 In April, check air conditioner function, change dryer in system.
- 3.1.2.2 In October, check heater system, check antifreeze levels.

3.2 Group II Vehicles - Ambulances

3.2.1 Every 3,000 Miles
- 3.2.1.1 Change oil and filters
- 3.2.1.2 Change the fuel filter
- 3.2.1.3 Replace air filters
- 3.2.1.4 Inspect belts, replace if necessary
- 3.2.1.5 Check cooling system, hoses, and clamps, replace if necessary
- 3.2.1.6 Inspect the drive shaft
- 3.2.1.7 Check throttle linkage and idle spring
- 3.2.1.8 Inspect fan and fan shroud
- 3.2.1.9 Check coolant strength
- 3.2.1.10 Inspect for fluid leaks
- 3.2.1.11 Lubricate transmission linkage
- 3.2.1.12 Inspect tires, replace if necessary
- 3.2.1.13 Inspect and lube front wheel bearings
- 3.2.1.14 Lubricate front axle spindles
- 3.2.1.15 Inspect rear carrier fluid for leaks and damage
- 3.2.1.16 Inspect brake system, note measurement
- 3.2.1.17 Lubricate caliper slide rails
- 3.2.1.18 Lubricate chassis
- 3.2.1.19 Lubricate doors, hood, hinges, and locks

3.2.1.20 Align front end
3.2.2 Each April
3.2.2.1 Make air conditioning functional
3.2.2.2 Change dryer in system
3.2.3 Each October
3.2.3.1 Make heating system functional
3.2.3.2 Check for leaks
3.2.3.3 Check antifreeze for right strength.
3.2.4 Annually
3.2.4.1 Change transmission fluid and filter
3.2.4.2 Change rear fluid
3.2.4.3 Change batteries
3.2.4.4 Change glow plugs
3.2.4.5 Change coolant
3.2.4.6 Perform power flush
3.2.4.7 Clean Radiator fins
3.2.4.8 Perform DOT inspection.

3.3 Group III Vehicles - Class B vehicles

3.3.1 Service A - **This service is required every 4000 miles, 250 engine hours or annually, whichever occurs first**.
3.3.1.1 Change engine oil
3.3.1.2 Change oil filters
3.3.1.3 Clean or replace air filter
3.3.1.4 Replace fuel filters(primary and secondary) at appropriate interval
3.3.1.5 Inspect belts, replace if necessary
3.3.1.6 Service air dryer
3.3.1.7 Change air compressor filter at appropriate interval
3.3.1.8 Inspect for leaks
3.3.1.9 Change water/fuel separator element at appropriate interval
3.3.1.10 Replace transmission fluid filter
3.3.1.11 Replace transmission fluid at appropriate interval per manufacturer.
3.3.1.12 Inspect transmission for leaks
3.3.1.13 Lubricate drive line and chassis
3.3.1.14 Check lubricant level
3.3.1.15 Clean transfer case breather
3.3.1.16 Change transfer case fluid at appropriate interval per manufacturer.
3.3.1.17 Check rear carrier fluid level
3.3.1.18 Check front wheel bearing lubricant
3.3.1.19 Inspect brake linings, list measurement
3.3.1.20 Check level of cooling system

3.3.1.21 Inspect hoses for wear, replace as necessary
3.3.1.22 Check for leaks around clamps, adjust as necessary
3.3.1.23 Perform DOT inspection

3.3.2 Each April
3.3.2.1 Make air conditioning functional
3.3.2.2 Change dryer in system
3.3.2.3 Change coolant and filter/conditioner
3.3.2.4 Flush radiator
3.3.2.5 Clean radiator fins

3.3.3 Each October
3.3.3.1 Make heating system functional
3.3.3.2 Check for leaks
3.3.3.3 Check antifreeze for the right strength.

3.3.4 Annually
3.3.4.1 Steam clean and lubricate the ladder, turntable, and other related parts (cylinders, locks, etc.).

4 In accordance with recommendations established by NFPA 1500, the following is a list of vehicle defects that are to be utilized in determining an unsafe vehicle operating condition. Any vehicle found to be unsafe shall be placed out of service until the appropriate repairs are completed. It is not the intent of these guidelines to identify every possible unsafe vehicle condition. A vehicle experiencing any of the defects listed below does not necessarily render it unsafe to drive. They are to be used as general guidelines in conjunction with the judgment of the vehicle operator to determine an unsafe vehicle.

4.1 Brakes

4.1.1 Audible or visual air leak at brake chamber (i.e., ruptured diaphragm, loose chamber clamp, etc.).
4.1.2 Air line with audible leak, or bulge / swelling, cracked or broken air line
4.1.3 Loose compressor mounting bolts, or loose or cracked pulley on air compressor.
4.1.4 Inoperable parking brake system, parking brake will not hold vehicle.
4.1.5 Evidence of oil seepage into or out of the brake lining/drum interface area.
4.1.6 Oil running from the drum or bearing seal area (inside of tire area).
4.1.7 Brake drums with evidence of external crack(s).
4.1.8 Low pressure warning device missing, inoperative or does not operate at 55 psi or below.
4.1.9 Air reservoir tanks separated from its attachment points.
4.1.10 Air leak of sufficient nature that air pressure cannot be maintained. between 80-90 psi, at engine idle, with parking brakes applied.

4.1.11 Master cylinder less than 1/4 full.
4.1.12 Any visually observed brake fluid leaks.

4.2 Steering System

4.2.1 Any steering wheel free play that seems excessive (30 degrees before the steering axle tire moves).
4.2.2 Any missing or loose steering support bolts/brackets.
4.2.3 Worn or faulty universal joints.
4.2.4 Steering wheel not properly secured.
4.2.5 Any looseness of the pitman arm on the steering gear.
4.2.6 Any loose power assist cylinder.
4.2.7 Any loose tie rod ends or drag links.
4.2.8 Any condition that interferes with the free movement of any steering component.

4.3 Exhaust System

4.3.1 Any exhaust system leak at a point forward of or directly below the cab that permits entry of exhaust fumes into the cab, jump seat or patient compartment area.
4.3.2 Any exhaust system component so located as to result in burning, charring, or damaging the electrical wiring, the fuel supply, or any combustible part of the vehicle.

4.4 Frame

4.4.1 Any cracked, loose, or broken frame member adversely affecting support of functional components such as steering gear, fifth wheel, engine, transmission, body parts, and suspension.

4.5 Fuel System

4.5.1 Any visible fuel system leak at any point.
4.5.2 The fuel tank not securely attached to the vehicle by reason of loose, broken or missing mounting bolts or brackets. (NOTE: Some fuel tanks use springs or rubber bushings to permit movement.)

4.6 Springs/Suspension System

4.6.1 Any u-bolts or other spring-to-axle clamp bolts cracked, loose or missing.
4.6.2 Any spring hanger cracked, loose or missing.

General Order 530.02: Personal Protective Equipment

DEPARTMENT OF FIRE AND RESCUE SERVICES

GENERAL ORDER

530.02

Originating From	Issue Date	Revision Date	Attachments
Logistics	**1/10/1985**	**1/5/2009**	**A**

SUBJECT: Personal Protective Equipment
APPLICABILITY: All Personnel

POLICY:
The Howard County Department of Fire and Rescue Services (DFRS) shall provide protective equipment to departmental members as outlined in the following procedure. The DFRS shall also establish guidelines for the standardized wear, use, and quantity of issued items.

1 PERSONAL PROTECTIVE EQUIPMENT

1.1 Personal Protective Equipment (PPE) shall meet NFPA guidelines as well as require DFRS approval. Personal Protective Equipment shall consist of the following:

1.1.1 Helmet with face shield (NFPA approved leather helmets may be worn and are furnished at the employee's expense).
1.1.2 Turnout coat
1.1.3 Turnout pants with suspenders
1.1.4 Short boots (NFPA approved leather "Pro" boots may be worn and are furnished at the employee's expense).
1.1.5 Personal rope
1.1.6 Pair of safety glasses
1.1.7 Protective hood (nomex or PBI)
1.1.8 Pair of firefighting gloves
1.1.9 Set of hearing protection
1.1.10 SCBA Face piece w/bag

1.2 Under no circumstances shall any damaged or defective Personal Protective Equipment be worn during emergency operations or training. It is the employee's responsibility to maintain protective equipment in serviceable condition. In the event that any PPE is damaged or lost, it is the employee's responsibility to immediately report such occurrence to his/her immediate supervisor. In an effort to ensure the highest level of safety and protection, all items shall be inspected by the shift officer on an annual basis and written documentation of said inspections will be included as part of the annual employee evaluation.

1.3 Refer to Attachment A for standard issued quantities of PPE items.

2 PROTECTIVE EQUIPMENT REPLACEMENT AND ALTERATIONS

2.1 Uniform clothing, protective equipment and accessories shall be replaced, one for one, on an as needed basis. Full time, Part time, Temporary and County Volunteer personnel requiring

replacement of issued items may do so by completing a Quartermaster Requisition form. If a replacement is requested on a lost or damaged item, proper documentation such as Loss/Damage Report and Police report, approved by the respective Battalion Chief, must accompany requisition form... The importance of safety and protection cannot be overstated. In the event that an article of personal protective or safety equipment is believed unserviceable, immediate arrangements between the station officer and the Quartermaster should be made for the replacement of such item. Volunteer Corporations in Howard County may requisition items from the Quartermaster for their volunteer personnel. The requisitions for volunteer personnel shall be approved by the Volunteer Chief or other official authorized to approve such expenditures.

2.2 It is the employee's responsibility to maintain PPE items in good condition. Proper care practices as well as the securing of issued PPE items to prevent loss from damage, theft, or otherwise is a shared responsibility of employees and shift officers. The shift officer shall monitor PPE items for appropriate care and initiate appropriate action to replace worn or damaged items.

3 WEAR REQUIREMENTS

3.1 The wearing of department issued clothing and personal protective equipment remains the property of the DFRS and is restricted to "on-duty" activities and department "sponsored" or "sanctioned" activities and training exercises, unless approved by the individual's Section Chief or Volunteer Chief.

3.2 Whenever any part of the department uniform (that an individual has purchased) is worn off-duty, the individual's conduct shall be as if the individual was on-duty.

3.3 The proper protective equipment shall be worn appropriate to the duties at hand.

Approved:

Joseph A. Herr
Fire Chief

DEPARTMENT OF FIRE AND RESCUE SERVICES

GENERAL ORDER

530.02

Personal Protective Equipment	Attachment A

Attachment A

PPE Item	Full Time Personnel	Part-Time/Contingent County Volunteer	DFRS Trainee
Turn Out Coat	2	1	1
Turn Out Pants	2	1	1
Suspenders (Pair)	2	1	1
Protective Hood	2	1	1
F.F. Gloves (Pair)	2	1	1
F.F. Boots (Pair)	1	1	1
Safety Glasses	1	1	1
Glass Case	1	1	1
Hearing Protection	1	1	1
Personal Rope	1	1	1
Gear Bag	1	1	1
B/A Face Piece	1	1	1
Infection Control Kit	1	1	1
*Prescription Glasses as Necessary			

Special Order 2004-42: Protective Equipment Cleaning

SPECIAL ORDER

Series	Number	Originating Bureau	Effective Date	Expiration Date
2004	42	Support Services	7/06/04	N/A

Subject: **Protective Equipment Cleaning**

1. This Special Order is a temporary order to identify the new procedures for the cleaning/repair/decontamination (decon) of protective equipment with our present cleaning contractor. A General Order will be issued to identify the inspection, cleaning, repair and decon procedures of all protective equipment in the near future.

2. This Special Order is applicable to all career and county volunteer personnel. Corporate volunteer stations may use this special order or develop their own procedures for protective equipment cleaning per NFPA 1851 Selection, Cleaning and Repair of Structural Fire Fighting Ensembles.

3. The Safety Officer will distribute a video tape, through the Training Division, covering the requirements of NFPA 1851 for Selection, Cleaning and Repair of the Structural Fire Fighting Ensembles. All personnel will sign an attached roster (Attachment A) after viewing the video. All rosters shall be forwarded to the Safety & Health Officer **by July 30, 2004.**

4. Every 12 months, at a minimum, departmental issued and approved personally owned protective equipment currently in-service and soiled, shall be sent for cleaning.

5. Turnout coats, turnout pants, structural firefighting gloves, and hoods will be the only items sent out for cleaning at this time. Any other items will need approval from the Deputy Chief of Support Services or designee.

6. The following process shall be used:

   a. Complete a Howard County Department of Fire and Rescue Services (DFRS) purchase request and obtain approval.

   b. **Each** item that is soiled, contaminated or needs repair shall be labeled with the DFRS (Fluorescent Green) Personal Protective Equipment (PPE) Inspection/Cleaning/Repair identification tag (Attachment B). The cleaning contractor must have this tag attached to each item.

   c. Complete the identification tag with the specific reason for the

cleaning/repair/decon and attach it to the item.

i. Secure tag to the top buckle of the turnout coat.
ii. Secure tag to waist buckle on the turnout pants.
iii. Rubber band the gloves and secure the tag to the gloves.
iv. Rubber band the hood and secure the tag to the hood.

d. Place all items in a clear plastic trash bag unless they are contaminated with bloodborne pathogens.

e. **Place items that are contaminated with bloodborne pathogens into a red bio-hazard bag. This is the ONLY method to be used for transporting bio-hazard contaminated protective equipment. These items require special shipping.**

f. Attach the completed DFRS Protective Ensemble Inspection Check List (Appendix C1 & C2) to the outside of the bag with tape after sealing the bag.

g. Place the items (bags) in the designated pickup point for each station/facility.

h. The mail person will pick up the items (bags) and transport the items to the Quartermaster's Office.

i. **No** bag shall be sent to the Quartermaster without the Protective Ensemble Inspection Check List attached to the outside of the bag.

j. The Quartermaster will log and package the items for shipment to the cleaning contractor.

k. Station/Facility officers shall track items sent to the Quartermaster for cleaning on the DFRS Personnel PPE Cleaning Log form (Attachment D).

l. All cleaned/repaired/deconed items will be returned by the mail person from the Quartermaster's Office.

7. All protective equipment should be scheduled for general cleaning during an off-work period (Kelly Day, Vacation, etc.) if possible.

8. All protective equipment shall be marked with the employee/member EID# in the event the inspection tag is removed. The EID# should not cover any identifying information on the label of the item.

9. A new Special Order (Protective Equipment Inventory) will be issued to help verify and compare present inventories of protective equipment.

Joseph A. Herr
Fire Chief

VIDEO ROSTER FOR NFPA 1851 VIDEO

Attachment A

A SHIFT			*B SHIFT*			*C SHIFT*		
EID#	INITIALS	PRINT NAME	EID#	INITIALS	PRINT NAME	EID#	INITIALS	PRINT NAME

Station # _____ or Bureau _____

Safety & Health Officer

1

Attachment B

From:
Howard Cnty. Fire & Rescue
Quartermaster Div.
9250 Bendix Rd.
Columbia, MD 21045
(410) 313-5761

P.O. # _____
Name _____
EID #_____ Sta/Shift _____

(Check all that applies below)

Coat Pants Hood Gloves

Serial # _____

GENERAL Cleaning/Repair _____
Describe known repairs needed:
_____
_____
_____

OR
DECON ___
Bio-hazard ____ or Chemical ____
Blood ___ Petro _____
Other ___ Other _____
Describe: Describe:
_____ _____

_____ _____

Howard Cnty. Fire & Rescue
Quartermaster Div.
9250 Bendix Rd.
Columbia, MD 21045

PPE INSPECTION
CLEANING
REPAIR TAG

1

2

3

Attachment C1

DFRS Inspection / Repair / Decon Check List

Turnout Coat - Pants - Hoods

Protective Ensemble Elements

Name:_____ EID #:_____

Inspector:_____ EID#:_____ Inspection Date:_____

TYPE OF INSPECTION / REPAIR / DECONTAMINATION

Routine	**Annual (Contactor)**	**Specialized (Contractor)**
(In Station)	(Completed w/ Evaluation)	(Contaminated or Special Needs)

(circle one)

Ratings: N - New or new condition, **G** - Good condition, **M** - Maintenance needed, **R** - Replace immediately

"Maintenance Needed" and "Replace Immediately" items are to be REMOVED form service.

Turnout coat and pants Ratings	N	G	M	R
Free from rips, tears, cuts and abrasions				
Free of thermal damage (charring, burn holes, melting, discoloring of any layer)				
Hardware is free of damage, intact and attached, trim maintains reflectivity				
Moisture barrier is free of rips, tears, cuts, abrasions, discoloration & thermal damage				
Ensemble fits and coat overlaps pants				
Seams are unbroken with no missing stitches (All items on coat)				
Wristlets have elasticity with no stretching, runs, cuts, burn holes				
Label is attached and legible				
Hook and loop closures are functional (Velcro is not worn, burned or matted)				
Liner attachment systems are functional				
No painted or added items on coat/pants				
Presence of hazardous materials				
NFPA Label located in/on item.				
Marked with EID# and in-service date				
If greater than 10 years old remove from service				

Hoods Ratings	N	G	M	R
Inspect for cuts, tears, worn areas				
Loose or open seams				
Discoloration or charring				
Hood not altered in any way				
Fits and interfaces with turnout coat with no gaps				
Elasticity around face opening				
Marked with EID# and in-service date				
NFPA Label located in/on item.				
If greater than 5 years old remove from service				

Identified Items needing attention:

1

DFRS Inspection / Repair / Decon Check List
Gloves - Eye Protection

Attachment C2

Name:_____ EID #:_____

Inspector:_____ EID#:_____ Inspection Date:_____

TYPE OF INSPECTION / REPAIR / DECONTAMINATION

Routine	**Annual (Contactor)**	**Specialized (Contractor)**
(In Station)	(Completed w/ Evaluation)	(Contaminated or Special Needs)

Ratings: N - New or new condition, **G** - Good condition, **M** - Maintenance needed, **R** - Replace immediately

"Maintenance Needed" and "Replace Immediately" items are to be REMOVED form service.

Gloves Ratings	N	G	M	R
Free from rips, tears, cuts and abrasions				
Free of thermal damage (charring, burn holes, melting, discoloring of any layer)				
Moisture barrier is free of rips, tears, cuts, abrasions, discoloration & thermal damage				
Seams are unbroken with no missing stitches (All items on coat)				
Wristlets have elasticity with no stretching, runs, cuts, burn holes				
NFPA Label located in/on item.				
Presence of hazardous materials				
Marked with EID# and in-service date				
If greater than 5 years old remove from service				

Eye Protection Ratings	N	G	M	R
ANSI marking "Z.87" on item (Look closely, number is hard to spot on frame)				
No scratches, discoloration of lens (Must have a clear lenses)				
All parts are tight and work (Free range of motion)				
Marked with EID# and in-service date				
If greater than 5 old years remove from service				

Identified Items needing attention:

2

3

Personnel PPE Cleaning Log

Attachment D

Station:__________________________ Shift:_________

EID#	Employee Name	Date Out of Service for Cleaning	Date Returned to Service	RM # or PDQ (Obtain from HQ)	Items for Cleaning/Repair/Decon
					Hood - Coat - Pants - Gloves

Special Order 2008.052: Field Safety Officer

DEPARTMENT OF FIRE AND RESCUE SERVICES

SPECIAL ORDER

2008.052

Originating From	Issue Date	Expiration Date	Attachments
Health, Wellness & Safety	**7/03/2008**	**N/A**	**N/A**

SUBJECT: Field Safety Officer Implementation
APPLICABILITY: All Personnel

1 The Howard County Department of Fire and Rescue Services (DFRS) in conjunction with the Health, Wellness and Safety Office and Operations will implement a 24 hour Field Safety Officer Program that will be effective on July 7, 2008. There will be three Captain Safety Officers assigned to a 24 hour shift.

1.1 The Unit designation will be Safety 1.

1.2 The Unit will be housed at Fire Station 9.

1.3 The Unit will routinely respond with Battalion 1.

2 **PRIMARY RESPONSIBILITIES:**

2.1 Safety 1 will be dispatched on all box assignments and working rescues. They may also respond to any other calls they feel need an additional safety presence.

2.2 Main responsibilities on emergency incidents will be on-scene safety.

2.3 Complete daily transition with other safety officer and Battalion Chief of Health, Wellness and Safety.

2.4 Handle routing and follow up of injury reports.

2.5 Assist with incident follow-up and post incident analysis.

2.6 Assure OSHA compliance regulations are met within the department.

3 **OTHER RESPONSIBILITIES AND DUTIES AS NECESSARY; TO INCLUDE BUT NOT LIMITED TOO:**

3.1 Complete all pertinent paperwork for incidents and maintenance needs.

3.2 Assist the Training Section with PSTC training activities as a safety officer.

3.3 Provide Safety related training to all DFRS personnel.

3.4 Assign, train and communicate safety needs with station safety representatives and follow up on monthly safety reports.

3.5 Develop and design "Back to the Basics" program to be delivered FY09 along with fitness in service.

3.6 Assist with the delivery of a Heavy Vehicle Operator training program.

3.7 Assist with annual safety inspections of all stations, facilities and apparatus.

3.8 Work with Fleet and Facilities on all safety application needs and purchasing.

3.9 Work with Quartermaster and breathing apparatus technicians on personal protective equipment and breathing apparatus safety needs and purchasing.

3.10 Work with communications liaison/staff to address any communication policy and practice needs related to safety.

3.11 Assist with quarterly departmental career/volunteer safety meetings.

3.12 Assist with scheduling of certification and recertification of ISO/HSO and ACE Personal Trainers.

3.13 Provide personal trainer services to staff and field personnel (volunteer and career).

3.14 Assist with purchasing/maintenance of physical fitness equipment for DFRS.

Approved:

Joseph A. Herr

Joseph A. Herr
Fire Chief

Special Order 2017.36: Pump Testing

Howard Co SPECIal Of()rRaDER cue Services

SPECIAL ORDER 2017.36

Pump Testing

BUREAU OF LOGISTICS

l$$UtOate:	AIII\ISI 3, 2017
Expiration	Se:ptember 30, 2017
D<lte:	All Penonnel
Appllcoblity:	

OVERVIEW

In acco<dance with NfPA 1911, Standard for lnsptttlon Malnlenance TtstlnR and Retlrt""nt of ln-StMct Atttmnotlvc FJrc Ano,rnu,s the Department of J:ire and Rescue Semces (Department) will conduct annual pump testlns ol al 1ppar11us equipped w◆h a fire pump.

DEFINITIONS

None

TOPIC DETAILS

- Testing wil be conducted at fire Station 8 from Monday, Ausust 28, 2017 throush Friday, September 8, 2017. During the testing period, personnel assigned to Fire Station 8 are not to part near the pump testing basin.
- A specific: testing schedule wil not be pubfished this year. lnstead, each morning, Fleet personnel wil provide the on-dUly Sanaion Chiefs with a list of engine companies scheduled lor durins the shift. fleet penonnel will then worlc with the on-duty company olf,cers to testing of cenain apparatus.
- Single *engine* companies with no reserve wil be provided with a reserve engine while testing is completed on the front line apparatus. Engine companies with a reserve engine will have each engine tested inOJYidually. Fleet personnel assume responsibility for transporting all apparatus to and from the testins site when possible; there may be times when companies will be asked to assist. in tral\SJX)rting apparatus to the testing site.
- Field personnel *are* to report any known mechanical and/or pump issues through the fleet Help Desk immediately in order to provide the shop ample time to make minor repairs.

Questions regarding this year's pump testing process can be directed to Battahon Chief Martin P. lePore at fdt686@howardcountymd gov , Ray Wines at fdt518@howardcountymd"gov or FF Michael Hitt at fd2498@howardcountymd gov.

FORMS/ATTACHMENTS/REFERENCES

Approved:

John S. Butler, Fire Chief
Office of the Fire Chief

Author:

Christine Uhlhorn, Assistant Chief
Bureau of Logistics

Special Order 2018.30: Annual Hose Testing

DEPARTMENT OF FIRE AND RESCUE SERVICES

GENERAL ORDER

500.01

Originating From	Issue Date	Revision Date	Attachments
Support Services	**12/10/1995**	**N/A**	**N/A**

SUBJECT: Annual Service Testing and Inspections
APPLICABILITY: All Personnel

POLICY:
Service testing and inspections, as a minimum, shall be conducted annually to insure that all equipment and apparatus in the Howard County Department of Fire and Rescue Services (DFRS) is in a constant state of operational readiness. This annual procedure shall help minimize equipment failure and increase safe and efficient operations during emergency incidents

1 General

1.1 All equipment and apparatus shall be tested and/or inspected annually to ensure proper operational safety. More frequent testing/inspections may be required for certain equipment as stated in this procedure.

1.2 All equipment and apparatus shall be tested and/or inspected after any suspected damage or extensive repairs.

1.3 All equipment and apparatus will be tested in accordance with NFPA standards or manufacturer recommendations.

1.4 Testing and inspections shall be conducted each spring during the months of March, April, and May, unless otherwise stated.

1.5 Apparatus or equipment that fails any portion of the service test will be placed out of service. Repairs, if appropriate, will be accomplished in a timely manner.

1.6 Failed apparatus or equipment shall be retested after repairs have been completed prior to returning to full performance emergency service.

1.7 An annual inventory shall be conducted of all equipment carried, to verify there are no Aunauthorized devices@ present.

1.8 A preventative maintenance program shall be in place for all apparatus and equipment in accordance with manufacturers' recommendations, DOT regulations and/or applicable NFPA standards

2 Equipment Requiring Annual Testing and/or Inspection:

2.1 Fire Service Pumps

2.1.1 Shall be conducted in accordance with NFPA 1911.

2.2 Hose

2.2.1 Shall be conducted in accordance with NFPA 1962, Chapter 5.

2.2.2 All new hose will be tested prior to being placed in service.

2.2.3 All Fire Service Hose that has any suspected damage or has been repaired will be service-tested prior to returning to emergency operations.

2.3 Rope, Life Safety Harnesses and Hardware

2.3.1 There is no approved method to service-test rope without compromising its strength. The DFRS shall use only NEW rope for rescue work.

2.3.2 Rope and accessories shall be inspected and/or removed from service in accordance with NFPA 1983, sec. 3.6 and manufacturer recommendations.

2.3.3 Life Safety Rope shall be downgraded after any use and altered in such a manner to prevent future accidental emergency service.

2.3.4 Training Ropes will be scheduled for replacement at regular intervals. Training Rope shall be destroyed after signs of wear, damage or impact loading.

2.4 Ground Ladders

2.4.1 Shall be tested in accordance with NFPA 1932.

2.4.2 Strength Service-testing and Hardness Testing of ground ladders will be conducted by an independent ladder-testing vendor. Interpretation of non-destructive test results must be performed only by certified personnel.

2.4.3 Testing agencies will provide certification documents stating that their personnel meet the American Society of Non-destructive Testing Requirements.

2.4.4 All Ground Ladders will be identified by: Serial Number, where applicable, and engraved on the beam with the unit radio identification number followed by the number 1, 2 or 3 (example: 21-1 = 35' 3-section ladder).

2.4.5 Heat Sensor Labels will be checked after every use. If a change in the label is noted, the ground ladder shall be removed from service and tested prior to returning to operational use.

2.5 Aerial Ladders and Elevating Platforms

2.5.1 All Aerial Ladders and Aerial Tower Apparatus will be tested in accordance with NFPA Standard 1914.

2.5.2 The inspections and tests will be performed by an independent vendor. Those selected vendors shall comply with the American Society for Testing and Materials Standard E543.

2.6 Breathing Apparatus and Cascade Systems, Pass Devices

2.6.1 SCBA of the open circuit design shall be positive pressure and shall meet the performance requirements of NFPA Standard 1981.

2.6.2 Compressed Breathing Air shall meet the requirements of the Compressed Gas Association G-7.1, Commodity Specification for Air, with a minimum air quality of Grade E, with a Dew Point greater than -55EF.

2.6.3 Sources of Compressed Breathing Air such as air compressors and cascade systems shall be tested every 3 months to assure compliance with Section 2.6.2.

2.6.4 SCBA Cylinders shall be hydrostatically tested according to applicable Federal Standards.

2.6.5 Annual performance testing and inspection of SCBA regulators shall be conducted in accordance with manufacturer specifications.

2.6.6 PASS devices shall be inspected and maintained according to manufacturer recommendations. Batteries shall be changed annually or when needed.

2.7 Air Quality Monitoring Devices/Explosive Meter

2.7.1 Monitoring devices shall be calibrated, inspected, and maintained according to manufacturer recommendations.

2.8 Portable Fire Extinguishers

2.8.1 Shall be inspected annually by a certified private vendor according to NFPA 10. This shall include vehicle mounted and station mounted units.

2.9 All Emergency Vehicles

2.9.1 All DFRS vehicles shall be maintained and inspected in accordance with established DFRS periodic maintenance and inspection procedures and with the Motor Vehicle Administration, Commercial Vehicle Inspections Division.

2.10 Boats

2.10.1 DFRS boats shall be maintained and equipped in compliance with Department of Natural Resources regulations.

2.11 Generators, Gas/Pneumatic/Hydraulic Tools and Miscellaneous Equipment

2.11.1 Shall be inspected annually and maintained according to manufacturer recommendations.

2.12 EMS Equipment

2.12.1 Ambulances, oxygen regulating equipment and related miscellaneous EMS equipment shall be inspected/tested every three years by a representative from MIEMS. The inspection/certification process shall be in accordance with the Maryland Voluntary Ambulance Inspection Program (VAIP).

2.12.2 An annual inventory shall be conducted of all equipment carried, to verify there are no Aunauthorized devices@ present.

2.12.3 Medical Defibrillators shall be inspected/maintained according to manufacturer specifications and MIEMSS.

2.12.4 Mechanical CPR devices shall be inspected/calibrated according to manufacturer specifications.

3 Records

3.1 Appropriate records of tests and maintenance shall be maintained at each station.

3.2 Annual service test results shall be forwarded to the Deputy Chief of Operations in a timely manner.

Approved:

Joseph A. Herr
Fire Chief